Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	100	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	30	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	18.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.331	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	x

Nodes

Name	Area (ha)	T of E (mins)	Add Inflow (l/s)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)	Invert Level (m)
S4				76.310		334458.559	354245.164	2.040	74.270
S5	0.030	5.00		76.512	1200	334433.839	354200.447	1.846	74.666
S6	0.012	5.00	0.1	76.259	1200	334412.845	354177.341	1.385	74.874
S7	0.014	5.00		76.560	1200	334380.207	354145.523	1.382	75.178
S8	0.015	5.00		77.100	450	334361.147	354147.456	1.288	75.812
S9				77.100	450	334335.106	354139.195	1.023	76.077
S10	0.021	5.00		77.100	450	334317.919	354121.067	0.744	76.356
S11	0.013	5.00		77.100	450	334326.842	354108.208	0.639	76.461
S12	0.050	5.00		77.250	450	334345.687	354117.517	0.955	76.295
S13	0.017	5.00		77.130	450	334330.226	354087.308	0.607	76.523

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
2.000	S13	S12	33.936	0.600	76.523	76.295	0.228	148.8	150	5.69	50.0
2.001	S12	S8	33.695	0.600	76.295	75.887	0.408	82.6	150	6.20	50.0
1.000	S11	S10	15.652	0.600	76.461	76.356	0.105	149.1	150	5.32	50.0
1.001	S10	S9	24.980	0.600	76.356	76.077	0.279	89.5	150	5.71	50.0
1.002	S9	S8	27.320	0.600	76.077	75.887	0.190	143.8	150	6.25	50.0
1.003	S8	S7	19.158	0.600	75.812	75.178	0.634	30.2	225	6.39	50.0
1.004	S7	S6	45.581	0.600	75.178	74.874	0.304	149.9	225	7.10	50.0
1.005	S6	S5	31.219	0.600	74.874	74.666	0.208	150.1	225	7.59	50.0
1.006	S5	S4	51.095	0.600	74.666	74.270	0.396	129.0	225	8.33	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
2.000	0.821	14.5	3.0	0.457	0.805	0.017	0.0	46	0.646
2.001	1.107	19.6	11.8	0.805	1.063	0.067	0.0	84	1.157
1.000	0.821	14.5	2.3	0.489	0.594	0.013	0.0	40	0.599
1.001	1.062	18.8	6.0	0.594	0.873	0.034	0.0	58	0.947
1.002	0.836	14.8	6.0	0.873	1.063	0.034	0.0	67	0.793
1.003	2.388	95.0	20.4	1.063	1.157	0.116	0.0	71	1.916
1.004	1.065	42.4	22.9	1.157	1.160	0.130	0.0	118	1.087
1.005	1.065	42.3	25.1	1.160	1.621	0.142	0.1	125	1.110
1.006	1.149	45.7	30.4	1.621	1.815	0.172	0.1	134	1.227

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Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
S4	334458.559	354245.164	76.310	2.040		1	1.006	74.270	225
S5	334433.839	354200.447	76.512	1.846	1200	1	1.005	74.666	225
						0	1.006	74.666	225
S6	334412.845	354177.341	76.259	1.385	1200	1	1.004	74.874	225
						0	1.005	74.874	225
S7	334380.207	354145.523	76.560	1.382	1200	1	1.003	75.178	225
						0	1.004	75.178	225
S8	334361.147	354147.456	77.100	1.288	450	1	2.001	75.887	150
						2	1.002	75.887	150
						0	1.003	75.812	225
S9	334335.106	354139.195	77.100	1.023	450	1	1.001	76.077	150
						0	1.002	76.077	150
S10	334317.919	354121.067	77.100	0.744	450	1	1.000	76.356	150
						0	1.001	76.356	150
S11	334326.842	354108.208	77.100	0.639	450	0	1.000	76.461	150
S12	334345.687	354117.517	77.250	0.955	450	1	2.000	76.295	150
						0	2.001	76.295	150
S13	334330.226	354087.308	77.130	0.607	450	0	2.000	76.523	150

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Detailed
Rainfall Events	Singular	Skip Steady State	x
FSR Region	England and Wales	Drain Down Time (mins)	1440
M5-60 (mm)	18.000	Additional Storage (m³/ha)	0.0
Ratio-R	0.331	Starting Level (m)	
Summer CV	0.750	Check Discharge Rate(s)	x
Winter CV	0.840	Check Discharge Volume	x

Storm Durations

15	30	60	120	180	240	360	480	600	720	960	1440

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Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
10	0	0	0
30	0	0	0
100	30	0	0

Node S4 Lined Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.47300	Invert Level (m)	73.811	Pit Length (m)	5.000
Side Inf Coefficient (m/hr)	0.47300	Time to half empty (mins)	17	Depth (m)	
Safety Factor	1.0	Ring Diameter (m)	2.400	Inf Depth (m)	0.500
Porosity	0.30	Pit Width (m)	5.500	Number Required	4

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
10 year 15 minute summer	178.718	50.571	30 year 360 minute summer	30.686	7.896
10 year 15 minute winter	125.416	50.571	30 year 360 minute winter	19.947	7.896
10 year 30 minute summer	118.986	33.669	30 year 480 minute summer	24.219	6.400
10 year 30 minute winter	83.499	33.669	30 year 480 minute winter	16.090	6.400
10 year 60 minute summer	81.648	21.577	30 year 600 minute summer	19.868	5.434
10 year 60 minute winter	54.245	21.577	30 year 600 minute winter	13.575	5.434
10 year 120 minute summer	51.091	13.502	30 year 720 minute summer	17.731	4.752
10 year 120 minute winter	33.944	13.502	30 year 720 minute winter	11.917	4.752
10 year 180 minute summer	39.574	10.184	30 year 960 minute summer	14.594	3.843
10 year 180 minute winter	25.724	10.184	30 year 960 minute winter	9.668	3.843
10 year 240 minute summer	31.452	8.312	30 year 1440 minute summer	10.616	2.845
10 year 240 minute winter	20.896	8.312	30 year 1440 minute winter	7.134	2.845
10 year 360 minute summer	24.187	6.224	100 year +30% CC 15 minute summer	377.954	106.948
10 year 360 minute winter	15.722	6.224	100 year +30% CC 15 minute winter	265.231	106.948
10 year 480 minute summer	19.172	5.067	100 year +30% CC 30 minute summer	256.672	72.629
10 year 480 minute winter	12.738	5.067	100 year +30% CC 30 minute winter	180.120	72.629
10 year 600 minute summer	15.784	4.317	100 year +30% CC 60 minute summer	178.538	47.182
10 year 600 minute winter	10.785	4.317	100 year +30% CC 60 minute winter	118.617	47.182
10 year 720 minute summer	14.130	3.787	100 year +30% CC 120 minute summer	112.176	29.645
10 year 720 minute winter	9.496	3.787	100 year +30% CC 120 minute winter	74.527	29.645
10 year 960 minute summer	11.689	3.078	100 year +30% CC 180 minute summer	86.522	22.265
10 year 960 minute winter	7.743	3.078	100 year +30% CC 180 minute winter	56.241	22.265
10 year 1440 minute summer	8.569	2.296	100 year +30% CC 240 minute summer	68.279	18.044
10 year 1440 minute winter	5.759	2.296	100 year +30% CC 240 minute winter	45.363	18.044
30 year 15 minute summer	225.422	63.787	100 year +30% CC 360 minute summer	51.779	13.324
30 year 15 minute winter	158.191	63.787	100 year +30% CC 360 minute winter	33.657	13.324
30 year 30 minute summer	151.507	42.871	100 year +30% CC 480 minute summer	40.673	10.749
30 year 30 minute winter	106.321	42.871	100 year +30% CC 480 minute winter	27.022	10.749
30 year 60 minute summer	104.640	27.653	100 year +30% CC 600 minute summer	33.235	9.091
30 year 60 minute winter	69.521	27.653	100 year +30% CC 600 minute winter	22.708	9.091
30 year 120 minute summer	65.606	17.338	100 year +30% CC 720 minute summer	29.563	7.923
30 year 120 minute winter	43.587	17.338	100 year +30% CC 720 minute winter	19.868	7.923
30 year 180 minute summer	50.714	13.050	100 year +30% CC 960 minute summer	24.198	6.372
30 year 180 minute winter	32.965	13.050	100 year +30% CC 960 minute winter	16.029	6.372
30 year 240 minute summer	40.170	10.616	100 year +30% CC 1440 minute summer	17.452	4.677
30 year 240 minute winter	26.688	10.616	100 year +30% CC 1440 minute winter	11.729	4.677

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Results for 10 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S4	16	73.978	-0.292	36.6	7.6229	0.0000	OK
15 minute winter	S5	12	74.820	0.154	37.2	0.1738	0.0000	OK
15 minute winter	S6	11	75.023	0.149	31.5	0.1689	0.0000	OK
15 minute winter	S7	11	75.317	0.139	28.7	0.1574	0.0000	OK
15 minute winter	S8	11	75.892	0.080	25.7	0.0127	0.0000	OK
15 minute winter	S9	11	76.155	0.078	7.6	0.0124	0.0000	OK
15 minute winter	S10	10	76.423	0.067	7.8	0.0107	0.0000	OK
15 minute winter	S11	10	76.507	0.046	3.0	0.0073	0.0000	OK
15 minute winter	S12	11	76.396	0.101	15.3	0.0161	0.0000	OK
15 minute winter	S13	10	76.575	0.052	3.9	0.0083	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute winter	S4	Infiltration		16.3			
15 minute winter	S5	1.006	S4	36.6	1.282	0.801	1.4588
15 minute winter	S6	1.005	S5	30.9	1.100	0.731	0.8852
15 minute winter	S7	1.004	S6	28.8	1.073	0.681	1.2251
15 minute winter	S8	1.003	S7	25.7	1.356	0.271	0.3671
15 minute winter	S9	1.002	S8	7.6	0.833	0.513	0.2486
15 minute winter	S10	1.001	S9	7.6	0.920	0.407	0.2088
15 minute winter	S11	1.000	S10	3.0	0.487	0.204	0.0957
15 minute winter	S12	2.001	S8	14.9	1.203	0.762	0.4173
15 minute winter	S13	2.000	S12	3.8	0.426	0.264	0.3059

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Results for 30 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	S4	26	74.066	-0.204	38.4	11.6364	0.0000	OK
15 minute winter	S5	12	74.853	0.187	46.7	0.2118	0.0000	OK
15 minute winter	S6	12	75.055	0.181	39.8	0.2046	0.0000	OK
15 minute winter	S7	11	75.343	0.165	36.3	0.1864	0.0000	OK
15 minute winter	S8	11	75.902	0.090	32.5	0.0144	0.0000	OK
15 minute winter	S9	11	76.168	0.091	9.7	0.0145	0.0000	OK
15 minute winter	S10	10	76.434	0.078	9.9	0.0124	0.0000	OK
15 minute winter	S11	10	76.513	0.052	3.8	0.0083	0.0000	OK
15 minute winter	S12	11	76.418	0.123	19.3	0.0196	0.0000	OK
15 minute winter	S13	10	76.582	0.059	4.9	0.0094	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
30 minute winter	S4	Infiltration		17.3			
15 minute winter	S5	1.006	S4	45.7	1.322	1.000	1.7664
15 minute winter	S6	1.005	S5	39.0	1.134	0.922	1.0856
15 minute winter	S7	1.004	S6	36.4	1.114	0.860	1.4885
15 minute winter	S8	1.003	S7	32.5	1.413	0.343	0.4412
15 minute winter	S9	1.002	S8	9.6	0.881	0.653	0.2992
15 minute winter	S10	1.001	S9	9.7	0.969	0.518	0.2516
15 minute winter	S11	1.000	S10	3.8	0.515	0.260	0.1147
15 minute winter	S12	2.001	S8	18.7	1.238	0.959	0.5101
15 minute winter	S13	2.000	S12	4.8	0.441	0.331	0.3707

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Results for 100 year +30% CC Critical Storm Duration. Lowest mass balance: 99.89%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	S4	27	74.510	0.240	58.0	26.4512	0.0000	OK
15 minute winter	S5	12	75.190	0.524	63.6	0.5921	0.0000	SURCHARGED
15 minute winter	S6	12	75.557	0.683	53.0	0.7720	0.0000	SURCHARGED
15 minute winter	S7	12	75.998	0.820	53.2	0.9278	0.0000	SURCHARGED
15 minute winter	S8	12	76.168	0.356	50.4	0.0567	0.0000	SURCHARGED
15 minute winter	S9	12	76.329	0.252	16.3	0.0400	0.0000	SURCHARGED
15 minute winter	S10	10	76.468	0.112	16.4	0.0178	0.0000	OK
15 minute winter	S11	10	76.530	0.069	6.3	0.0109	0.0000	OK
15 minute winter	S12	12	76.990	0.695	29.7	0.1105	0.0000	FLOOD RISK
15 minute winter	S13	12	77.047	0.524	8.3	0.0834	0.0000	FLOOD RISK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
30 minute winter	S4	Infiltration		20.0			
15 minute winter	S5	1.006	S4	62.0	1.561	1.358	1.9767
15 minute winter	S6	1.005	S5	52.1	1.310	1.231	1.2416
15 minute winter	S7	1.004	S6	47.8	1.202	1.129	1.8128
15 minute winter	S8	1.003	S7	46.4	1.464	0.488	0.7619
15 minute winter	S9	1.002	S8	15.8	0.955	1.067	0.4810
15 minute winter	S10	1.001	S9	16.3	1.062	0.869	0.3855
15 minute winter	S11	1.000	S10	6.3	0.575	0.431	0.1714
15 minute winter	S12	2.001	S8	27.8	1.577	1.420	0.5932
15 minute winter	S13	2.000	S12	8.1	0.460	0.557	0.5974

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Results for 10 year 15 minute summer. 1455 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	S4	16	73.953	-0.317	34.9	6.4987	0.0000	OK
15 minute summer	S5	12	74.814	0.148	35.5	0.1679	0.0000	OK
15 minute summer	S6	11	75.018	0.144	30.1	0.1632	0.0000	OK
15 minute summer	S7	11	75.313	0.135	27.5	0.1527	0.0000	OK
15 minute summer	S8	11	75.890	0.078	24.6	0.0124	0.0000	OK
15 minute summer	S9	11	76.153	0.076	7.3	0.0121	0.0000	OK
15 minute summer	S10	10	76.422	0.066	7.4	0.0104	0.0000	OK
15 minute summer	S11	10	76.505	0.044	2.8	0.0071	0.0000	OK
15 minute summer	S12	11	76.393	0.098	14.5	0.0155	0.0000	OK
15 minute summer	S13	10	76.574	0.051	3.7	0.0081	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute summer	S4	Infiltration		16.0			
15 minute summer	S5	1.006	S4	34.9	1.270	0.763	1.4035
15 minute summer	S6	1.005	S5	29.6	1.093	0.699	0.8528
15 minute summer	S7	1.004	S6	27.5	1.064	0.650	1.1798
15 minute summer	S8	1.003	S7	24.6	1.341	0.259	0.3545
15 minute summer	S9	1.002	S8	7.3	0.824	0.491	0.2404
15 minute summer	S10	1.001	S9	7.3	0.919	0.390	0.2025
15 minute summer	S11	1.000	S10	2.8	0.475	0.192	0.0921
15 minute summer	S12	2.001	S8	14.2	1.192	0.726	0.4016
15 minute summer	S13	2.000	S12	3.6	0.420	0.250	0.2943

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Results for 10 year 15 minute winter. 1455 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S4	16	73.978	-0.292	36.6	7.6229	0.0000	OK
15 minute winter	S5	12	74.820	0.154	37.2	0.1738	0.0000	OK
15 minute winter	S6	11	75.023	0.149	31.5	0.1689	0.0000	OK
15 minute winter	S7	11	75.317	0.139	28.7	0.1574	0.0000	OK
15 minute winter	S8	11	75.892	0.080	25.7	0.0127	0.0000	OK
15 minute winter	S9	11	76.155	0.078	7.6	0.0124	0.0000	OK
15 minute winter	S10	10	76.423	0.067	7.8	0.0107	0.0000	OK
15 minute winter	S11	10	76.507	0.046	3.0	0.0073	0.0000	OK
15 minute winter	S12	11	76.396	0.101	15.3	0.0161	0.0000	OK
15 minute winter	S13	10	76.575	0.052	3.9	0.0083	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute winter	S4	Infiltration		16.3			
15 minute winter	S5	1.006	S4	36.6	1.282	0.801	1.4588
15 minute winter	S6	1.005	S5	30.9	1.100	0.731	0.8852
15 minute winter	S7	1.004	S6	28.8	1.073	0.681	1.2251
15 minute winter	S8	1.003	S7	25.7	1.356	0.271	0.3671
15 minute winter	S9	1.002	S8	7.6	0.833	0.513	0.2486
15 minute winter	S10	1.001	S9	7.6	0.920	0.407	0.2088
15 minute winter	S11	1.000	S10	3.0	0.487	0.204	0.0957
15 minute winter	S12	2.001	S8	14.9	1.203	0.762	0.4173
15 minute winter	S13	2.000	S12	3.8	0.426	0.264	0.3059

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Results for 10 year 30 minute summer. 1470 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	S4	24	73.961	-0.309	32.4	6.8722	0.0000	OK
30 minute summer	S5	19	74.807	0.141	33.3	0.1596	0.0000	OK
30 minute summer	S6	19	75.013	0.139	27.7	0.1567	0.0000	OK
30 minute summer	S7	18	75.306	0.128	25.7	0.1445	0.0000	OK
30 minute summer	S8	18	75.887	0.075	22.9	0.0119	0.0000	OK
30 minute summer	S9	18	76.149	0.072	6.8	0.0115	0.0000	OK
30 minute summer	S10	18	76.419	0.063	6.8	0.0100	0.0000	OK
30 minute summer	S11	18	76.504	0.043	2.6	0.0068	0.0000	OK
30 minute summer	S12	18	76.388	0.093	13.4	0.0148	0.0000	OK
30 minute summer	S13	18	76.572	0.049	3.4	0.0078	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
30 minute summer	S4	Infiltration		16.1			
30 minute summer	S5	1.006	S4	32.4	1.255	0.710	1.3209
30 minute summer	S6	1.005	S5	27.8	1.072	0.656	0.8093
30 minute summer	S7	1.004	S6	25.4	1.046	0.600	1.1126
30 minute summer	S8	1.003	S7	22.9	1.319	0.241	0.3333
30 minute summer	S9	1.002	S8	6.7	0.809	0.451	0.2257
30 minute summer	S10	1.001	S9	6.8	0.894	0.363	0.1924
30 minute summer	S11	1.000	S10	2.6	0.470	0.179	0.0870
30 minute summer	S12	2.001	S8	13.2	1.173	0.677	0.3803
30 minute summer	S13	2.000	S12	3.4	0.415	0.234	0.2806

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Results for 10 year 30 minute winter. 1470 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	S4	25	73.974	-0.296	30.1	7.4568	0.0000	OK
30 minute winter	S5	19	74.800	0.134	30.5	0.1517	0.0000	OK
30 minute winter	S6	19	75.004	0.130	25.4	0.1476	0.0000	OK
30 minute winter	S7	19	75.299	0.121	23.3	0.1364	0.0000	OK
30 minute winter	S8	18	75.883	0.071	20.8	0.0113	0.0000	OK
30 minute winter	S9	18	76.146	0.069	6.2	0.0109	0.0000	OK
30 minute winter	S10	18	76.415	0.059	6.2	0.0095	0.0000	OK
30 minute winter	S11	18	76.502	0.041	2.4	0.0065	0.0000	OK
30 minute winter	S12	18	76.382	0.087	12.1	0.0139	0.0000	OK
30 minute winter	S13	18	76.570	0.047	3.1	0.0075	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
30 minute winter	S4	Infiltration		16.3			
30 minute winter	S5	1.006	S4	30.1	1.234	0.660	1.2481
30 minute winter	S6	1.005	S5	25.4	1.047	0.600	0.7576
30 minute winter	S7	1.004	S6	23.2	1.022	0.549	1.0373
30 minute winter	S8	1.003	S7	20.8	1.292	0.219	0.3101
30 minute winter	S9	1.002	S8	6.1	0.791	0.414	0.2113
30 minute winter	S10	1.001	S9	6.2	0.867	0.331	0.1796
30 minute winter	S11	1.000	S10	2.4	0.463	0.165	0.0815
30 minute winter	S12	2.001	S8	12.0	1.149	0.614	0.3523
30 minute winter	S13	2.000	S12	3.1	0.406	0.213	0.2605

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Results for 10 year 60 minute summer. 1500 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	S4	40	73.931	-0.339	25.4	5.4653	0.0000	OK
60 minute summer	S5	35	74.786	0.120	25.7	0.1360	0.0000	OK
60 minute summer	S6	34	74.991	0.117	21.4	0.1320	0.0000	OK
60 minute summer	S7	34	75.286	0.108	19.6	0.1227	0.0000	OK
60 minute summer	S8	33	75.877	0.065	17.5	0.0104	0.0000	OK
60 minute summer	S9	33	76.139	0.062	5.2	0.0099	0.0000	OK
60 minute summer	S10	33	76.410	0.054	5.2	0.0086	0.0000	OK
60 minute summer	S11	33	76.499	0.038	2.0	0.0060	0.0000	OK
60 minute summer	S12	33	76.374	0.078	10.2	0.0125	0.0000	OK
60 minute summer	S13	33	76.566	0.043	2.6	0.0068	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
60 minute summer	S4	Infiltration		15.8			
60 minute summer	S5	1.006	S4	25.4	1.186	0.555	1.0930
60 minute summer	S6	1.005	S5	21.4	1.009	0.505	0.6612
60 minute summer	S7	1.004	S6	19.6	0.986	0.462	0.9053
60 minute summer	S8	1.003	S7	17.5	1.242	0.185	0.2725
60 minute summer	S9	1.002	S8	5.1	0.756	0.347	0.1854
60 minute summer	S10	1.001	S9	5.2	0.831	0.277	0.1574
60 minute summer	S11	1.000	S10	2.0	0.441	0.138	0.0715
60 minute summer	S12	2.001	S8	10.1	1.105	0.518	0.3089
60 minute summer	S13	2.000	S12	2.6	0.391	0.179	0.2285

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Results for 10 year 60 minute winter. 1500 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	S4	41	73.915	-0.355	21.1	4.7637	0.0000	OK
60 minute winter	S5	35	74.774	0.108	21.2	0.1220	0.0000	OK
60 minute winter	S6	34	74.978	0.104	17.6	0.1173	0.0000	OK
60 minute winter	S7	33	75.275	0.097	16.0	0.1092	0.0000	OK
60 minute winter	S8	33	75.871	0.059	14.3	0.0094	0.0000	OK
60 minute winter	S9	33	76.132	0.055	4.2	0.0088	0.0000	OK
60 minute winter	S10	33	76.404	0.048	4.2	0.0077	0.0000	OK
60 minute winter	S11	34	76.495	0.034	1.6	0.0053	0.0000	OK
60 minute winter	S12	33	76.365	0.070	8.3	0.0111	0.0000	OK
60 minute winter	S13	34	76.561	0.038	2.1	0.0061	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
60 minute winter	S4	Infiltration		15.6			
60 minute winter	S5	1.006	S4	21.1	1.133	0.462	0.9519
60 minute winter	S6	1.005	S5	17.6	0.961	0.416	0.5718
60 minute winter	S7	1.004	S6	16.0	0.940	0.378	0.7779
60 minute winter	S8	1.003	S7	14.3	1.181	0.151	0.2349
60 minute winter	S9	1.002	S8	4.2	0.716	0.282	0.1593
60 minute winter	S10	1.001	S9	4.2	0.783	0.224	0.1347
60 minute winter	S11	1.000	S10	1.6	0.416	0.110	0.0611
60 minute winter	S12	2.001	S8	8.3	1.052	0.424	0.2653
60 minute winter	S13	2.000	S12	2.1	0.371	0.145	0.1960

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Results for 10 year 120 minute summer. 1560 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	S4	70	73.871	-0.399	17.2	2.7434	0.0000	OK
120 minute summer	S5	66	74.762	0.096	17.4	0.1083	0.0000	OK
120 minute summer	S6	64	74.966	0.092	14.4	0.1039	0.0000	OK
120 minute summer	S7	64	75.264	0.086	13.1	0.0975	0.0000	OK
120 minute summer	S8	64	75.865	0.053	11.7	0.0084	0.0000	OK
120 minute summer	S9	64	76.127	0.050	3.4	0.0079	0.0000	OK
120 minute summer	S10	64	76.399	0.043	3.4	0.0069	0.0000	OK
120 minute summer	S11	64	76.491	0.030	1.3	0.0048	0.0000	OK
120 minute summer	S12	64	76.357	0.062	6.8	0.0099	0.0000	OK
120 minute summer	S13	64	76.558	0.035	1.7	0.0055	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
120 minute summer	S4	Infiltration		15.1			
120 minute summer	S5	1.006	S4	17.2	1.075	0.376	0.8161
120 minute summer	S6	1.005	S5	14.3	0.912	0.337	0.4883
120 minute summer	S7	1.004	S6	13.1	0.894	0.308	0.6656
120 minute summer	S8	1.003	S7	11.7	1.119	0.123	0.2022
120 minute summer	S9	1.002	S8	3.4	0.676	0.230	0.1371
120 minute summer	S10	1.001	S9	3.4	0.738	0.181	0.1157
120 minute summer	S11	1.000	S10	1.3	0.390	0.090	0.0526
120 minute summer	S12	2.001	S8	6.8	1.000	0.347	0.2289
120 minute summer	S13	2.000	S12	1.7	0.349	0.117	0.1688

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Results for 10 year 120 minute winter. 1560 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	S4	68	73.855	-0.415	13.4	2.0205	0.0000	OK
120 minute winter	S5	64	74.750	0.084	13.5	0.0948	0.0000	OK
120 minute winter	S6	64	74.954	0.080	11.1	0.0901	0.0000	OK
120 minute winter	S7	64	75.253	0.075	10.1	0.0847	0.0000	OK
120 minute winter	S8	64	75.859	0.047	9.0	0.0074	0.0000	OK
120 minute winter	S9	66	76.120	0.043	2.6	0.0069	0.0000	OK
120 minute winter	S10	64	76.394	0.038	2.6	0.0060	0.0000	OK
120 minute winter	S11	62	76.488	0.027	1.0	0.0042	0.0000	OK
120 minute winter	S12	64	76.349	0.054	5.2	0.0085	0.0000	OK
120 minute winter	S13	64	76.553	0.030	1.3	0.0048	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
120 minute winter	S4	Infiltration		13.3			
120 minute winter	S5	1.006	S4	13.4	1.006	0.294	0.6826
120 minute winter	S6	1.005	S5	11.1	0.853	0.262	0.4062
120 minute winter	S7	1.004	S6	10.1	0.837	0.238	0.5497
120 minute winter	S8	1.003	S7	9.0	1.042	0.095	0.1674
120 minute winter	S9	1.002	S8	2.6	0.629	0.176	0.1130
120 minute winter	S10	1.001	S9	2.6	0.684	0.138	0.0954
120 minute winter	S11	1.000	S10	1.0	0.367	0.069	0.0435
120 minute winter	S12	2.001	S8	5.2	0.931	0.266	0.1881
120 minute winter	S13	2.000	S12	1.3	0.329	0.090	0.1388

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Results for 10 year 180 minute summer. 1620 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	S4	100	73.854	-0.416	13.2	1.9498	0.0000	OK
180 minute summer	S5	96	74.749	0.083	13.3	0.0940	0.0000	OK
180 minute summer	S6	96	74.953	0.079	11.0	0.0897	0.0000	OK
180 minute summer	S7	96	75.253	0.075	10.0	0.0843	0.0000	OK
180 minute summer	S8	96	75.858	0.046	8.9	0.0074	0.0000	OK
180 minute summer	S9	96	76.120	0.043	2.6	0.0069	0.0000	OK
180 minute summer	S10	96	76.394	0.038	2.6	0.0060	0.0000	OK
180 minute summer	S11	96	76.488	0.027	1.0	0.0042	0.0000	OK
180 minute summer	S12	96	76.348	0.053	5.1	0.0084	0.0000	OK
180 minute summer	S13	96	76.553	0.030	1.3	0.0048	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
180 minute summer	S4	Infiltration		12.8			
180 minute summer	S5	1.006	S4	13.2	1.002	0.290	0.6754
180 minute summer	S6	1.005	S5	11.0	0.852	0.260	0.4028
180 minute summer	S7	1.004	S6	10.0	0.835	0.236	0.5461
180 minute summer	S8	1.003	S7	8.9	1.039	0.094	0.1662
180 minute summer	S9	1.002	S8	2.6	0.629	0.176	0.1130
180 minute summer	S10	1.001	S9	2.6	0.686	0.138	0.0954
180 minute summer	S11	1.000	S10	1.0	0.362	0.069	0.0435
180 minute summer	S12	2.001	S8	5.1	0.927	0.261	0.1855
180 minute summer	S13	2.000	S12	1.3	0.327	0.090	0.1374

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Results for 10 year 180 minute winter. 1620 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	S4	100	73.845	-0.425	10.3	1.5526	0.0000	OK
180 minute winter	S5	96	74.739	0.073	10.3	0.0822	0.0000	OK
180 minute winter	S6	96	74.943	0.069	8.5	0.0781	0.0000	OK
180 minute winter	S7	96	75.243	0.065	7.7	0.0734	0.0000	OK
180 minute winter	S8	96	75.853	0.041	6.9	0.0065	0.0000	OK
180 minute winter	S9	96	76.115	0.038	2.0	0.0060	0.0000	OK
180 minute winter	S10	96	76.389	0.033	2.0	0.0053	0.0000	OK
180 minute winter	S11	96	76.485	0.024	0.8	0.0038	0.0000	OK
180 minute winter	S12	96	76.342	0.047	4.0	0.0074	0.0000	OK
180 minute winter	S13	96	76.550	0.027	1.0	0.0042	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
180 minute winter	S4	Infiltration		10.2			
180 minute winter	S5	1.006	S4	10.3	0.934	0.225	0.5622
180 minute winter	S6	1.005	S5	8.5	0.795	0.201	0.3338
180 minute winter	S7	1.004	S6	7.7	0.779	0.182	0.4507
180 minute winter	S8	1.003	S7	6.9	0.972	0.073	0.1378
180 minute winter	S9	1.002	S8	2.0	0.583	0.135	0.0936
180 minute winter	S10	1.001	S9	2.0	0.634	0.107	0.0790
180 minute winter	S11	1.000	S10	0.8	0.345	0.055	0.0365
180 minute winter	S12	2.001	S8	4.0	0.867	0.205	0.1555
180 minute winter	S13	2.000	S12	1.0	0.307	0.069	0.1148

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Results for 10 year 240 minute summer. 1680 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	S4	128	73.848	-0.422	11.1	1.6675	0.0000	OK
240 minute summer	S5	128	74.742	0.076	11.2	0.0854	0.0000	OK
240 minute summer	S6	124	74.946	0.072	9.3	0.0814	0.0000	OK
240 minute summer	S7	124	75.246	0.068	8.5	0.0768	0.0000	OK
240 minute summer	S8	124	75.855	0.043	7.6	0.0068	0.0000	OK
240 minute summer	S9	124	76.117	0.040	2.3	0.0063	0.0000	OK
240 minute summer	S10	124	76.391	0.035	2.3	0.0056	0.0000	OK
240 minute summer	S11	124	76.486	0.025	0.9	0.0040	0.0000	OK
240 minute summer	S12	124	76.344	0.049	4.4	0.0077	0.0000	OK
240 minute summer	S13	124	76.551	0.028	1.1	0.0044	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
240 minute summer	S4	Infiltration		11.0			
240 minute summer	S5	1.006	S4	11.1	0.955	0.243	0.5933
240 minute summer	S6	1.005	S5	9.2	0.813	0.216	0.3518
240 minute summer	S7	1.004	S6	8.4	0.797	0.198	0.4789
240 minute summer	S8	1.003	S7	7.6	0.999	0.080	0.1468
240 minute summer	S9	1.002	S8	2.2	0.602	0.151	0.1014
240 minute summer	S10	1.001	S9	2.3	0.660	0.121	0.0861
240 minute summer	S11	1.000	S10	0.9	0.354	0.062	0.0398
240 minute summer	S12	2.001	S8	4.3	0.885	0.222	0.1649
240 minute summer	S13	2.000	S12	1.1	0.308	0.075	0.1219

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Results for 10 year 240 minute winter. 1680 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	S4	128	73.839	-0.431	8.4	1.2681	0.0000	OK
240 minute winter	S5	124	74.731	0.065	8.4	0.0738	0.0000	OK
240 minute winter	S6	128	74.936	0.062	6.9	0.0700	0.0000	OK
240 minute winter	S7	128	75.236	0.058	6.2	0.0656	0.0000	OK
240 minute winter	S8	128	75.849	0.037	5.5	0.0058	0.0000	OK
240 minute winter	S9	128	76.111	0.034	1.6	0.0053	0.0000	OK
240 minute winter	S10	124	76.386	0.030	1.6	0.0047	0.0000	OK
240 minute winter	S11	116	76.482	0.021	0.6	0.0033	0.0000	OK
240 minute winter	S12	128	76.337	0.042	3.2	0.0066	0.0000	OK
240 minute winter	S13	120	76.547	0.024	0.8	0.0038	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
240 minute winter	S4	Infiltration		8.3			
240 minute winter	S5	1.006	S4	8.4	0.883	0.183	0.4846
240 minute winter	S6	1.005	S5	6.9	0.752	0.163	0.2870
240 minute winter	S7	1.004	S6	6.2	0.733	0.146	0.3859
240 minute winter	S8	1.003	S7	5.5	0.908	0.058	0.1176
240 minute winter	S9	1.002	S8	1.6	0.548	0.108	0.0798
240 minute winter	S10	1.001	S9	1.6	0.595	0.085	0.0674
240 minute winter	S11	1.000	S10	0.6	0.316	0.041	0.0307
240 minute winter	S12	2.001	S8	3.2	0.815	0.164	0.1324
240 minute winter	S13	2.000	S12	0.8	0.291	0.055	0.0978

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Results for 10 year 360 minute summer. 1800 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	S4	192	73.839	-0.431	8.4	1.2684	0.0000	OK
360 minute summer	S5	184	74.732	0.066	8.6	0.0742	0.0000	OK
360 minute summer	S6	184	74.937	0.063	7.2	0.0712	0.0000	OK
360 minute summer	S7	184	75.238	0.060	6.6	0.0674	0.0000	OK
360 minute summer	S8	184	75.850	0.038	5.9	0.0060	0.0000	OK
360 minute summer	S9	184	76.112	0.035	1.8	0.0056	0.0000	OK
360 minute summer	S10	184	76.387	0.031	1.8	0.0050	0.0000	OK
360 minute summer	S11	184	76.483	0.022	0.7	0.0036	0.0000	OK
360 minute summer	S12	184	76.337	0.042	3.4	0.0068	0.0000	OK
360 minute summer	S13	184	76.548	0.025	0.9	0.0040	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
360 minute summer	S4	Infiltration		8.3			
360 minute summer	S5	1.006	S4	8.4	0.884	0.185	0.4880
360 minute summer	S6	1.005	S5	7.1	0.761	0.168	0.2916
360 minute summer	S7	1.004	S6	6.5	0.745	0.154	0.3979
360 minute summer	S8	1.003	S7	5.9	0.931	0.062	0.1225
360 minute summer	S9	1.002	S8	1.7	0.561	0.118	0.0851
360 minute summer	S10	1.001	S9	1.8	0.617	0.095	0.0723
360 minute summer	S11	1.000	S10	0.7	0.328	0.048	0.0335
360 minute summer	S12	2.001	S8	3.3	0.824	0.171	0.1365
360 minute summer	S13	2.000	S12	0.9	0.299	0.061	0.1023

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Results for 10 year 360 minute winter. 1800 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	S4	192	73.832	-0.438	6.3	0.9619	0.0000	OK
360 minute winter	S5	184	74.723	0.057	6.3	0.0639	0.0000	OK
360 minute winter	S6	184	74.928	0.054	5.3	0.0607	0.0000	OK
360 minute winter	S7	184	75.229	0.051	4.8	0.0574	0.0000	OK
360 minute winter	S8	184	75.844	0.032	4.3	0.0052	0.0000	OK
360 minute winter	S9	184	76.107	0.030	1.3	0.0048	0.0000	OK
360 minute winter	S10	184	76.383	0.027	1.3	0.0042	0.0000	OK
360 minute winter	S11	184	76.480	0.019	0.5	0.0030	0.0000	OK
360 minute winter	S12	184	76.331	0.036	2.4	0.0057	0.0000	OK
360 minute winter	S13	176	76.544	0.021	0.6	0.0033	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
360 minute winter	S4	Infiltration		6.3			
360 minute winter	S5	1.006	S4	6.3	0.814	0.138	0.3964
360 minute winter	S6	1.005	S5	5.2	0.698	0.124	0.2348
360 minute winter	S7	1.004	S6	4.8	0.684	0.112	0.3177
360 minute winter	S8	1.003	S7	4.3	0.850	0.045	0.0978
360 minute winter	S9	1.002	S8	1.3	0.514	0.087	0.0682
360 minute winter	S10	1.001	S9	1.3	0.560	0.069	0.0578
360 minute winter	S11	1.000	S10	0.5	0.305	0.034	0.0267
360 minute winter	S12	2.001	S8	2.4	0.751	0.123	0.1077
360 minute winter	S13	2.000	S12	0.6	0.265	0.041	0.0796

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Results for 10 year 480 minute summer. 1920 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	S4	248	73.834	-0.436	7.0	1.0579	0.0000	OK
480 minute summer	S5	248	74.726	0.060	7.0	0.0673	0.0000	OK
480 minute summer	S6	248	74.931	0.057	5.8	0.0639	0.0000	OK
480 minute summer	S7	248	75.231	0.053	5.2	0.0600	0.0000	OK
480 minute summer	S8	248	75.846	0.034	4.6	0.0053	0.0000	OK
480 minute summer	S9	248	76.107	0.030	1.3	0.0048	0.0000	OK
480 minute summer	S10	248	76.383	0.027	1.3	0.0043	0.0000	OK
480 minute summer	S11	240	76.480	0.019	0.5	0.0030	0.0000	OK
480 minute summer	S12	248	76.333	0.038	2.7	0.0060	0.0000	OK
480 minute summer	S13	248	76.545	0.022	0.7	0.0036	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
480 minute summer	S4	Infiltration		7.0			
480 minute summer	S5	1.006	S4	7.0	0.839	0.153	0.4263
480 minute summer	S6	1.005	S5	5.8	0.717	0.137	0.2525
480 minute summer	S7	1.004	S6	5.2	0.698	0.123	0.3399
480 minute summer	S8	1.003	S7	4.6	0.862	0.048	0.1036
480 minute summer	S9	1.002	S8	1.3	0.516	0.088	0.0688
480 minute summer	S10	1.001	S9	1.3	0.560	0.069	0.0582
480 minute summer	S11	1.000	S10	0.5	0.305	0.034	0.0267
480 minute summer	S12	2.001	S8	2.7	0.776	0.138	0.1172
480 minute summer	S13	2.000	S12	0.7	0.277	0.048	0.0873

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Results for 10 year 480 minute winter. 1920 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	S4	248	73.828	-0.442	5.2	0.7898	0.0000	OK
480 minute winter	S5	248	74.717	0.051	5.2	0.0579	0.0000	OK
480 minute winter	S6	248	74.922	0.048	4.3	0.0548	0.0000	OK
480 minute winter	S7	248	75.223	0.045	3.8	0.0512	0.0000	OK
480 minute winter	S8	248	75.841	0.029	3.4	0.0046	0.0000	OK
480 minute winter	S9	240	76.104	0.027	1.0	0.0042	0.0000	OK
480 minute winter	S10	232	76.380	0.024	1.0	0.0037	0.0000	OK
480 minute winter	S11	232	76.478	0.017	0.4	0.0027	0.0000	OK
480 minute winter	S12	248	76.328	0.033	2.0	0.0052	0.0000	OK
480 minute winter	S13	240	76.542	0.019	0.5	0.0030	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
480 minute winter	S4	Infiltration		5.2			
480 minute winter	S5	1.006	S4	5.2	0.770	0.114	0.3449
480 minute winter	S6	1.005	S5	4.3	0.660	0.102	0.2036
480 minute winter	S7	1.004	S6	3.8	0.637	0.090	0.2723
480 minute winter	S8	1.003	S7	3.4	0.795	0.036	0.0830
480 minute winter	S9	1.002	S8	1.0	0.478	0.068	0.0572
480 minute winter	S10	1.001	S9	1.0	0.520	0.053	0.0483
480 minute winter	S11	1.000	S10	0.4	0.281	0.028	0.0225
480 minute winter	S12	2.001	S8	2.0	0.713	0.102	0.0946
480 minute winter	S13	2.000	S12	0.5	0.253	0.034	0.0699

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Results for 10 year 600 minute summer. 2040 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	S4	315	73.830	-0.440	5.8	0.8823	0.0000	OK
600 minute summer	S5	315	74.720	0.054	5.8	0.0612	0.0000	OK
600 minute summer	S6	315	74.925	0.051	4.8	0.0580	0.0000	OK
600 minute summer	S7	315	75.226	0.048	4.3	0.0545	0.0000	OK
600 minute summer	S8	315	75.843	0.031	3.8	0.0049	0.0000	OK
600 minute summer	S9	315	76.105	0.028	1.1	0.0044	0.0000	OK
600 minute summer	S10	315	76.381	0.025	1.1	0.0039	0.0000	OK
600 minute summer	S11	315	76.478	0.017	0.4	0.0027	0.0000	OK
600 minute summer	S12	315	76.329	0.034	2.2	0.0055	0.0000	OK
600 minute summer	S13	315	76.544	0.021	0.6	0.0033	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
600 minute summer	S4	Infiltration		5.8			
600 minute summer	S5	1.006	S4	5.8	0.795	0.127	0.3728
600 minute summer	S6	1.005	S5	4.8	0.680	0.113	0.2204
600 minute summer	S7	1.004	S6	4.3	0.662	0.102	0.2962
600 minute summer	S8	1.003	S7	3.8	0.817	0.040	0.0904
600 minute summer	S9	1.002	S8	1.1	0.491	0.074	0.0612
600 minute summer	S10	1.001	S9	1.1	0.534	0.059	0.0517
600 minute summer	S11	1.000	S10	0.4	0.270	0.028	0.0234
600 minute summer	S12	2.001	S8	2.2	0.732	0.112	0.1012
600 minute summer	S13	2.000	S12	0.6	0.272	0.041	0.0763

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Results for 10 year 600 minute winter. 2040 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	S4	315	73.826	-0.444	4.5	0.6847	0.0000	OK
600 minute winter	S5	315	74.714	0.048	4.5	0.0539	0.0000	OK
600 minute winter	S6	315	74.919	0.045	3.7	0.0508	0.0000	OK
600 minute winter	S7	315	75.220	0.042	3.3	0.0478	0.0000	OK
600 minute winter	S8	315	75.839	0.027	2.9	0.0043	0.0000	OK
600 minute winter	S9	285	76.101	0.024	0.8	0.0038	0.0000	OK
600 minute winter	S10	285	76.377	0.021	0.8	0.0034	0.0000	OK
600 minute winter	S11	270	76.476	0.015	0.3	0.0024	0.0000	OK
600 minute winter	S12	315	76.325	0.030	1.7	0.0048	0.0000	OK
600 minute winter	S13	285	76.540	0.017	0.4	0.0027	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
600 minute winter	S4	Infiltration		4.5			
600 minute winter	S5	1.006	S4	4.5	0.739	0.098	0.3112
600 minute winter	S6	1.005	S5	3.7	0.631	0.087	0.1831
600 minute winter	S7	1.004	S6	3.3	0.613	0.078	0.2453
600 minute winter	S8	1.003	S7	2.9	0.754	0.031	0.0749
600 minute winter	S9	1.002	S8	0.8	0.448	0.054	0.0488
600 minute winter	S10	1.001	S9	0.8	0.486	0.043	0.0412
600 minute winter	S11	1.000	S10	0.3	0.264	0.021	0.0189
600 minute winter	S12	2.001	S8	1.7	0.680	0.087	0.0842
600 minute winter	S13	2.000	S12	0.4	0.238	0.028	0.0615

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Results for 10 year 720 minute summer. 2160 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	S4	375	73.828	-0.442	5.2	0.7910	0.0000	OK
720 minute summer	S5	375	74.717	0.051	5.2	0.0579	0.0000	OK
720 minute summer	S6	375	74.922	0.048	4.3	0.0548	0.0000	OK
720 minute summer	S7	375	75.223	0.045	3.8	0.0512	0.0000	OK
720 minute summer	S8	375	75.841	0.029	3.4	0.0046	0.0000	OK
720 minute summer	S9	375	76.104	0.027	1.0	0.0042	0.0000	OK
720 minute summer	S10	375	76.380	0.024	1.0	0.0037	0.0000	OK
720 minute summer	S11	375	76.478	0.017	0.4	0.0027	0.0000	OK
720 minute summer	S12	375	76.328	0.033	2.0	0.0052	0.0000	OK
720 minute summer	S13	375	76.542	0.019	0.5	0.0030	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
720 minute summer	S4	Infiltration		5.2			
720 minute summer	S5	1.006	S4	5.2	0.770	0.114	0.3449
720 minute summer	S6	1.005	S5	4.3	0.660	0.102	0.2036
720 minute summer	S7	1.004	S6	3.8	0.636	0.090	0.2723
720 minute summer	S8	1.003	S7	3.4	0.795	0.036	0.0830
720 minute summer	S9	1.002	S8	1.0	0.478	0.068	0.0572
720 minute summer	S10	1.001	S9	1.0	0.519	0.053	0.0483
720 minute summer	S11	1.000	S10	0.4	0.281	0.028	0.0225
720 minute summer	S12	2.001	S8	2.0	0.713	0.102	0.0946
720 minute summer	S13	2.000	S12	0.5	0.248	0.034	0.0699

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Results for 10 year 720 minute winter. 2160 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	S4	375	73.824	-0.446	4.0	0.6086	0.0000	OK
720 minute winter	S5	375	74.711	0.045	4.0	0.0508	0.0000	OK
720 minute winter	S6	375	74.916	0.042	3.3	0.0480	0.0000	OK
720 minute winter	S7	375	75.218	0.040	2.9	0.0449	0.0000	OK
720 minute winter	S8	375	75.838	0.026	2.6	0.0041	0.0000	OK
720 minute winter	S9	375	76.101	0.024	0.8	0.0038	0.0000	OK
720 minute winter	S10	375	76.377	0.021	0.8	0.0034	0.0000	OK
720 minute winter	S11	345	76.476	0.015	0.3	0.0024	0.0000	OK
720 minute winter	S12	360	76.323	0.028	1.5	0.0045	0.0000	OK
720 minute winter	S13	360	76.540	0.017	0.4	0.0027	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
720 minute winter	S4	Infiltration		4.0			
720 minute winter	S5	1.006	S4	4.0	0.714	0.088	0.2862
720 minute winter	S6	1.005	S5	3.3	0.611	0.078	0.1686
720 minute winter	S7	1.004	S6	2.9	0.587	0.068	0.2251
720 minute winter	S8	1.003	S7	2.6	0.733	0.027	0.0688
720 minute winter	S9	1.002	S8	0.8	0.448	0.054	0.0488
720 minute winter	S10	1.001	S9	0.8	0.486	0.043	0.0412
720 minute winter	S11	1.000	S10	0.3	0.265	0.021	0.0189
720 minute winter	S12	2.001	S8	1.5	0.655	0.077	0.0771
720 minute winter	S13	2.000	S12	0.4	0.239	0.028	0.0579

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Results for 10 year 960 minute summer. 2400 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	S4	495	73.825	-0.445	4.2	0.6390	0.0000	OK
960 minute summer	S5	495	74.712	0.046	4.2	0.0521	0.0000	OK
960 minute summer	S6	495	74.918	0.044	3.5	0.0495	0.0000	OK
960 minute summer	S7	495	75.219	0.041	3.1	0.0463	0.0000	OK
960 minute summer	S8	495	75.839	0.027	2.8	0.0042	0.0000	OK
960 minute summer	S9	480	76.101	0.024	0.8	0.0038	0.0000	OK
960 minute summer	S10	480	76.377	0.021	0.8	0.0034	0.0000	OK
960 minute summer	S11	480	76.476	0.015	0.3	0.0024	0.0000	OK
960 minute summer	S12	495	76.324	0.029	1.6	0.0046	0.0000	OK
960 minute summer	S13	480	76.540	0.017	0.4	0.0027	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
960 minute summer	S4	Infiltration		4.2			
960 minute summer	S5	1.006	S4	4.2	0.724	0.092	0.2963
960 minute summer	S6	1.005	S5	3.5	0.624	0.083	0.1753
960 minute summer	S7	1.004	S6	3.1	0.600	0.073	0.2355
960 minute summer	S8	1.003	S7	2.8	0.754	0.029	0.0722
960 minute summer	S9	1.002	S8	0.8	0.448	0.054	0.0488
960 minute summer	S10	1.001	S9	0.8	0.487	0.043	0.0412
960 minute summer	S11	1.000	S10	0.3	0.251	0.021	0.0189
960 minute summer	S12	2.001	S8	1.6	0.668	0.082	0.0807
960 minute summer	S13	2.000	S12	0.4	0.239	0.028	0.0597

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Results for 10 year 960 minute winter. 2400 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	S4	495	73.822	-0.448	3.2	0.4869	0.0000	OK
960 minute winter	S5	495	74.706	0.040	3.2	0.0456	0.0000	OK
960 minute winter	S6	495	74.913	0.039	2.7	0.0435	0.0000	OK
960 minute winter	S7	495	75.214	0.036	2.4	0.0409	0.0000	OK
960 minute winter	S8	480	75.835	0.023	2.1	0.0037	0.0000	OK
960 minute winter	S9	465	76.098	0.021	0.6	0.0033	0.0000	OK
960 minute winter	S10	465	76.374	0.018	0.6	0.0029	0.0000	OK
960 minute winter	S11	390	76.473	0.012	0.2	0.0020	0.0000	OK
960 minute winter	S12	480	76.320	0.025	1.2	0.0040	0.0000	OK
960 minute winter	S13	435	76.538	0.015	0.3	0.0024	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
960 minute winter	S4	Infiltration		3.2			
960 minute winter	S5	1.006	S4	3.2	0.668	0.070	0.2447
960 minute winter	S6	1.005	S5	2.7	0.581	0.064	0.1452
960 minute winter	S7	1.004	S6	2.4	0.558	0.057	0.1962
960 minute winter	S8	1.003	S7	2.1	0.695	0.022	0.0599
960 minute winter	S9	1.002	S8	0.6	0.411	0.041	0.0399
960 minute winter	S10	1.001	S9	0.6	0.447	0.032	0.0337
960 minute winter	S11	1.000	S10	0.2	0.248	0.014	0.0150
960 minute winter	S12	2.001	S8	1.2	0.614	0.061	0.0659
960 minute winter	S13	2.000	S12	0.3	0.222	0.021	0.0487

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Results for 10 year 1440 minute summer. 2880 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	S4	750	73.821	-0.449	3.1	0.4717	0.0000	OK
1440 minute summer	S5	750	74.706	0.040	3.1	0.0449	0.0000	OK
1440 minute summer	S6	750	74.912	0.038	2.6	0.0427	0.0000	OK
1440 minute summer	S7	750	75.213	0.035	2.3	0.0401	0.0000	OK
1440 minute summer	S8	750	75.835	0.023	2.1	0.0037	0.0000	OK
1440 minute summer	S9	750	76.098	0.021	0.6	0.0033	0.0000	OK
1440 minute summer	S10	750	76.374	0.018	0.6	0.0029	0.0000	OK
1440 minute summer	S11	690	76.473	0.012	0.2	0.0020	0.0000	OK
1440 minute summer	S12	750	76.320	0.025	1.2	0.0040	0.0000	OK
1440 minute summer	S13	720	76.538	0.015	0.3	0.0024	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
1440 minute summer	S4	Infiltration		3.1			
1440 minute summer	S5	1.006	S4	3.1	0.662	0.068	0.2392
1440 minute summer	S6	1.005	S5	2.6	0.573	0.061	0.1416
1440 minute summer	S7	1.004	S6	2.3	0.550	0.054	0.1906
1440 minute summer	S8	1.003	S7	2.1	0.695	0.022	0.0587
1440 minute summer	S9	1.002	S8	0.6	0.411	0.041	0.0399
1440 minute summer	S10	1.001	S9	0.6	0.446	0.032	0.0337
1440 minute summer	S11	1.000	S10	0.2	0.228	0.014	0.0150
1440 minute summer	S12	2.001	S8	1.2	0.614	0.061	0.0659
1440 minute summer	S13	2.000	S12	0.3	0.231	0.021	0.0487

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Results for 10 year 1440 minute winter. 2880 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	S4	750	73.819	-0.451	2.5	0.3804	0.0000	OK
1440 minute winter	S5	750	74.702	0.036	2.5	0.0404	0.0000	OK
1440 minute winter	S6	750	74.908	0.034	2.1	0.0384	0.0000	OK
1440 minute winter	S7	750	75.209	0.031	1.8	0.0356	0.0000	OK
1440 minute winter	S8	750	75.832	0.020	1.6	0.0032	0.0000	OK
1440 minute winter	S9	690	76.096	0.019	0.5	0.0030	0.0000	OK
1440 minute winter	S10	690	76.373	0.017	0.5	0.0027	0.0000	OK
1440 minute winter	S11	690	76.473	0.012	0.2	0.0020	0.0000	OK
1440 minute winter	S12	750	76.317	0.022	0.9	0.0035	0.0000	OK
1440 minute winter	S13	600	76.535	0.012	0.2	0.0020	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
1440 minute winter	S4	Infiltration		2.5			
1440 minute winter	S5	1.006	S4	2.5	0.622	0.055	0.2054
1440 minute winter	S6	1.005	S5	2.1	0.540	0.050	0.1215
1440 minute winter	S7	1.004	S6	1.8	0.506	0.042	0.1621
1440 minute winter	S8	1.003	S7	1.6	0.634	0.017	0.0491
1440 minute winter	S9	1.002	S8	0.5	0.389	0.034	0.0351
1440 minute winter	S10	1.001	S9	0.5	0.422	0.027	0.0297
1440 minute winter	S11	1.000	S10	0.2	0.228	0.014	0.0138
1440 minute winter	S12	2.001	S8	0.9	0.564	0.046	0.0538
1440 minute winter	S13	2.000	S12	0.2	0.201	0.014	0.0388

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Results for 30 year 15 minute summer. 1455 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	S4	16	74.020	-0.250	43.9	9.5561	0.0000	OK
15 minute summer	S5	12	74.845	0.179	44.8	0.2026	0.0000	OK
15 minute summer	S6	12	75.048	0.174	38.2	0.1965	0.0000	OK
15 minute summer	S7	11	75.337	0.159	34.9	0.1804	0.0000	OK
15 minute summer	S8	11	75.900	0.088	31.2	0.0140	0.0000	OK
15 minute summer	S9	11	76.165	0.088	9.3	0.0140	0.0000	OK
15 minute summer	S10	10	76.432	0.076	9.4	0.0120	0.0000	OK
15 minute summer	S11	10	76.512	0.050	3.6	0.0080	0.0000	OK
15 minute summer	S12	11	76.414	0.119	18.4	0.0188	0.0000	OK
15 minute summer	S13	10	76.581	0.058	4.7	0.0092	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute summer	S4	Infiltration		16.8			
15 minute summer	S5	1.006	S4	43.9	1.319	0.960	1.7075
15 minute summer	S6	1.005	S5	37.5	1.133	0.885	1.0429
15 minute summer	S7	1.004	S6	34.9	1.108	0.823	1.4332
15 minute summer	S8	1.003	S7	31.2	1.400	0.329	0.4266
15 minute summer	S9	1.002	S8	9.2	0.871	0.622	0.2880
15 minute summer	S10	1.001	S9	9.3	0.966	0.493	0.2424
15 minute summer	S11	1.000	S10	3.6	0.508	0.246	0.1103
15 minute summer	S12	2.001	S8	18.0	1.235	0.921	0.4912
15 minute summer	S13	2.000	S12	4.6	0.443	0.319	0.3586

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Results for 30 year 15 minute winter. 1455 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S4	17	74.056	-0.214	45.7	11.1804	0.0000	OK
15 minute winter	S5	12	74.853	0.187	46.7	0.2118	0.0000	OK
15 minute winter	S6	12	75.055	0.181	39.8	0.2046	0.0000	OK
15 minute winter	S7	11	75.343	0.165	36.3	0.1864	0.0000	OK
15 minute winter	S8	11	75.902	0.090	32.5	0.0144	0.0000	OK
15 minute winter	S9	11	76.168	0.091	9.7	0.0145	0.0000	OK
15 minute winter	S10	10	76.434	0.078	9.9	0.0124	0.0000	OK
15 minute winter	S11	10	76.513	0.052	3.8	0.0083	0.0000	OK
15 minute winter	S12	11	76.418	0.123	19.3	0.0196	0.0000	OK
15 minute winter	S13	10	76.582	0.059	4.9	0.0094	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute winter	S4	Infiltration		17.2			
15 minute winter	S5	1.006	S4	45.7	1.322	1.000	1.7664
15 minute winter	S6	1.005	S5	39.0	1.134	0.922	1.0856
15 minute winter	S7	1.004	S6	36.4	1.114	0.860	1.4885
15 minute winter	S8	1.003	S7	32.5	1.413	0.343	0.4412
15 minute winter	S9	1.002	S8	9.6	0.881	0.653	0.2992
15 minute winter	S10	1.001	S9	9.7	0.969	0.518	0.2516
15 minute winter	S11	1.000	S10	3.8	0.515	0.260	0.1147
15 minute winter	S12	2.001	S8	18.7	1.238	0.959	0.5101
15 minute winter	S13	2.000	S12	4.8	0.441	0.331	0.3707

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Results for 30 year 30 minute summer. 1470 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	S4	25	74.039	-0.231	41.2	10.4235	0.0000	OK
30 minute summer	S5	19	74.835	0.169	42.2	0.1908	0.0000	OK
30 minute summer	S6	19	75.040	0.166	35.2	0.1873	0.0000	OK
30 minute summer	S7	18	75.328	0.150	32.6	0.1700	0.0000	OK
30 minute summer	S8	18	75.897	0.085	29.0	0.0135	0.0000	OK
30 minute summer	S9	18	76.161	0.084	8.6	0.0133	0.0000	OK
30 minute summer	S10	18	76.428	0.072	8.6	0.0114	0.0000	OK
30 minute summer	S11	18	76.509	0.048	3.3	0.0077	0.0000	OK
30 minute summer	S12	18	76.406	0.111	17.0	0.0177	0.0000	OK
30 minute summer	S13	18	76.579	0.056	4.3	0.0089	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
30 minute summer	S4	Infiltration		17.0			
30 minute summer	S5	1.006	S4	41.2	1.309	0.902	1.6090
30 minute summer	S6	1.005	S5	35.3	1.116	0.834	0.9877
30 minute summer	S7	1.004	S6	32.3	1.095	0.764	1.3525
30 minute summer	S8	1.003	S7	29.0	1.381	0.305	0.4010
30 minute summer	S9	1.002	S8	8.4	0.856	0.572	0.2705
30 minute summer	S10	1.001	S9	8.6	0.942	0.459	0.2306
30 minute summer	S11	1.000	S10	3.3	0.500	0.228	0.1038
30 minute summer	S12	2.001	S8	16.8	1.224	0.858	0.4620
30 minute summer	S13	2.000	S12	4.3	0.432	0.296	0.3391

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Results for 30 year 30 minute winter. 1470 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	S4	26	74.066	-0.204	38.4	11.6364	0.0000	OK
30 minute winter	S5	19	74.825	0.159	38.8	0.1800	0.0000	OK
30 minute winter	S6	19	75.028	0.154	32.3	0.1745	0.0000	OK
30 minute winter	S7	18	75.319	0.141	29.7	0.1596	0.0000	OK
30 minute winter	S8	18	75.893	0.081	26.5	0.0129	0.0000	OK
30 minute winter	S9	18	76.156	0.079	7.8	0.0126	0.0000	OK
30 minute winter	S10	18	76.424	0.068	7.8	0.0108	0.0000	OK
30 minute winter	S11	18	76.507	0.046	3.0	0.0073	0.0000	OK
30 minute winter	S12	18	76.398	0.103	15.4	0.0164	0.0000	OK
30 minute winter	S13	18	76.576	0.053	3.9	0.0084	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
30 minute winter	S4	Infiltration		17.3			
30 minute winter	S5	1.006	S4	38.4	1.294	0.839	1.5145
30 minute winter	S6	1.005	S5	32.3	1.095	0.764	0.9219
30 minute winter	S7	1.004	S6	29.6	1.073	0.698	1.2576
30 minute winter	S8	1.003	S7	26.5	1.358	0.279	0.3737
30 minute winter	S9	1.002	S8	7.7	0.838	0.522	0.2521
30 minute winter	S10	1.001	S9	7.8	0.915	0.416	0.2142
30 minute winter	S11	1.000	S10	3.0	0.489	0.207	0.0965
30 minute winter	S12	2.001	S8	15.3	1.206	0.782	0.4270
30 minute winter	S13	2.000	S12	3.9	0.423	0.269	0.3138

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Results for 30 year 60 minute summer. 1500 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	S4	41	74.012	-0.258	32.6	9.1616	0.0000	OK
60 minute summer	S5	34	74.807	0.141	33.0	0.1599	0.0000	OK
60 minute summer	S6	34	75.011	0.137	27.4	0.1550	0.0000	OK
60 minute summer	S7	33	75.305	0.126	25.1	0.1431	0.0000	OK
60 minute summer	S8	33	75.886	0.074	22.4	0.0118	0.0000	OK
60 minute summer	S9	33	76.149	0.072	6.6	0.0114	0.0000	OK
60 minute summer	S10	33	76.418	0.062	6.6	0.0098	0.0000	OK
60 minute summer	S11	33	76.503	0.042	2.5	0.0067	0.0000	OK
60 minute summer	S12	33	76.387	0.092	13.1	0.0147	0.0000	OK
60 minute summer	S13	33	76.571	0.048	3.3	0.0077	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
60 minute summer	S4	Infiltration		16.7			
60 minute summer	S5	1.006	S4	32.6	1.255	0.712	1.3259
60 minute summer	S6	1.005	S5	27.4	1.061	0.646	0.8051
60 minute summer	S7	1.004	S6	25.1	1.039	0.592	1.1006
60 minute summer	S8	1.003	S7	22.4	1.312	0.236	0.3290
60 minute summer	S9	1.002	S8	6.5	0.804	0.442	0.2222
60 minute summer	S10	1.001	S9	6.6	0.879	0.352	0.1886
60 minute summer	S11	1.000	S10	2.5	0.464	0.172	0.0848
60 minute summer	S12	2.001	S8	13.0	1.169	0.666	0.3752
60 minute summer	S13	2.000	S12	3.3	0.410	0.227	0.2761

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Results for 30 year 60 minute winter. 1500 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	S4	43	74.007	-0.263	27.0	8.9434	0.0000	OK
60 minute winter	S5	35	74.791	0.125	27.2	0.1416	0.0000	OK
60 minute winter	S6	34	74.994	0.120	22.5	0.1362	0.0000	OK
60 minute winter	S7	34	75.290	0.112	20.5	0.1263	0.0000	OK
60 minute winter	S8	33	75.879	0.067	18.3	0.0106	0.0000	OK
60 minute winter	S9	34	76.141	0.064	5.4	0.0102	0.0000	OK
60 minute winter	S10	33	76.411	0.055	5.4	0.0087	0.0000	OK
60 minute winter	S11	33	76.499	0.038	2.1	0.0061	0.0000	OK
60 minute winter	S12	33	76.376	0.081	10.6	0.0128	0.0000	OK
60 minute winter	S13	33	76.567	0.044	2.7	0.0069	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
60 minute winter	S4	Infiltration		16.6			
60 minute winter	S5	1.006	S4	27.0	1.203	0.592	1.1481
60 minute winter	S6	1.005	S5	22.5	1.015	0.531	0.6912
60 minute winter	S7	1.004	S6	20.5	0.994	0.484	0.9407
60 minute winter	S8	1.003	S7	18.3	1.253	0.193	0.2823
60 minute winter	S9	1.002	S8	5.4	0.765	0.364	0.1922
60 minute winter	S10	1.001	S9	5.4	0.834	0.288	0.1623
60 minute winter	S11	1.000	S10	2.1	0.449	0.145	0.0737
60 minute winter	S12	2.001	S8	10.6	1.116	0.540	0.3190
60 minute winter	S13	2.000	S12	2.7	0.392	0.186	0.2356

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Results for 30 year 120 minute summer. 1560 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	S4	72	73.931	-0.339	22.1	5.4611	0.0000	OK
120 minute summer	S5	64	74.777	0.111	22.4	0.1252	0.0000	OK
120 minute summer	S6	64	74.981	0.107	18.6	0.1208	0.0000	OK
120 minute summer	S7	64	75.278	0.100	16.9	0.1126	0.0000	OK
120 minute summer	S8	64	75.872	0.060	15.1	0.0096	0.0000	OK
120 minute summer	S9	64	76.134	0.057	4.4	0.0091	0.0000	OK
120 minute summer	S10	64	76.405	0.049	4.4	0.0078	0.0000	OK
120 minute summer	S11	64	76.496	0.035	1.7	0.0055	0.0000	OK
120 minute summer	S12	64	76.367	0.072	8.7	0.0114	0.0000	OK
120 minute summer	S13	64	76.562	0.039	2.2	0.0063	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
120 minute summer	S4	Infiltration		15.8			
120 minute summer	S5	1.006	S4	22.1	1.147	0.484	0.9846
120 minute summer	S6	1.005	S5	18.5	0.972	0.436	0.5928
120 minute summer	S7	1.004	S6	16.9	0.950	0.398	0.8086
120 minute summer	S8	1.003	S7	15.1	1.194	0.159	0.2441
120 minute summer	S9	1.002	S8	4.4	0.725	0.297	0.1655
120 minute summer	S10	1.001	S9	4.4	0.791	0.234	0.1397
120 minute summer	S11	1.000	S10	1.7	0.423	0.117	0.0634
120 minute summer	S12	2.001	S8	8.7	1.065	0.444	0.2750
120 minute summer	S13	2.000	S12	2.2	0.372	0.152	0.2031

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Results for 30 year 120 minute winter. 1560 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	S4	72	73.887	-0.383	17.3	3.4679	0.0000	OK
120 minute winter	S5	66	74.762	0.096	17.3	0.1088	0.0000	OK
120 minute winter	S6	64	74.966	0.092	14.3	0.1039	0.0000	OK
120 minute winter	S7	64	75.264	0.086	13.0	0.0972	0.0000	OK
120 minute winter	S8	64	75.865	0.053	11.6	0.0084	0.0000	OK
120 minute winter	S9	66	76.127	0.050	3.4	0.0079	0.0000	OK
120 minute winter	S10	64	76.399	0.043	3.4	0.0069	0.0000	OK
120 minute winter	S11	64	76.491	0.030	1.3	0.0048	0.0000	OK
120 minute winter	S12	64	76.357	0.062	6.7	0.0098	0.0000	OK
120 minute winter	S13	66	76.558	0.035	1.7	0.0055	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
120 minute winter	S4	Infiltration		15.3			
120 minute winter	S5	1.006	S4	17.3	1.076	0.378	0.8211
120 minute winter	S6	1.005	S5	14.3	0.911	0.337	0.4902
120 minute winter	S7	1.004	S6	13.0	0.892	0.307	0.6641
120 minute winter	S8	1.003	S7	11.6	1.117	0.122	0.2013
120 minute winter	S9	1.002	S8	3.4	0.677	0.230	0.1373
120 minute winter	S10	1.001	S9	3.4	0.737	0.181	0.1158
120 minute winter	S11	1.000	S10	1.3	0.390	0.090	0.0526
120 minute winter	S12	2.001	S8	6.7	0.996	0.343	0.2266
120 minute winter	S13	2.000	S12	1.7	0.351	0.117	0.1676

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Results for 30 year 180 minute summer. 1620 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	S4	100	73.876	-0.394	17.1	2.9496	0.0000	OK
180 minute summer	S5	96	74.762	0.096	17.2	0.1084	0.0000	OK
180 minute summer	S6	96	74.966	0.092	14.2	0.1035	0.0000	OK
180 minute summer	S7	96	75.264	0.086	12.9	0.0967	0.0000	OK
180 minute summer	S8	96	75.865	0.053	11.5	0.0084	0.0000	OK
180 minute summer	S9	96	76.127	0.050	3.4	0.0079	0.0000	OK
180 minute summer	S10	96	76.399	0.043	3.4	0.0069	0.0000	OK
180 minute summer	S11	96	76.491	0.030	1.3	0.0048	0.0000	OK
180 minute summer	S12	96	76.356	0.061	6.6	0.0097	0.0000	OK
180 minute summer	S13	96	76.558	0.035	1.7	0.0055	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
180 minute summer	S4	Infiltration		15.2			
180 minute summer	S5	1.006	S4	17.1	1.073	0.375	0.8163
180 minute summer	S6	1.005	S5	14.2	0.909	0.335	0.4878
180 minute summer	S7	1.004	S6	12.9	0.890	0.305	0.6605
180 minute summer	S8	1.003	S7	11.5	1.114	0.121	0.2001
180 minute summer	S9	1.002	S8	3.4	0.676	0.230	0.1373
180 minute summer	S10	1.001	S9	3.4	0.739	0.181	0.1158
180 minute summer	S11	1.000	S10	1.3	0.390	0.090	0.0526
180 minute summer	S12	2.001	S8	6.6	0.992	0.337	0.2241
180 minute summer	S13	2.000	S12	1.7	0.352	0.117	0.1663

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Results for 30 year 180 minute winter. 1620 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	S4	100	73.854	-0.416	13.2	1.9861	0.0000	OK
180 minute winter	S5	96	74.749	0.083	13.2	0.0937	0.0000	OK
180 minute winter	S6	96	74.953	0.079	10.9	0.0893	0.0000	OK
180 minute winter	S7	96	75.252	0.074	9.9	0.0838	0.0000	OK
180 minute winter	S8	96	75.858	0.046	8.8	0.0073	0.0000	OK
180 minute winter	S9	96	76.120	0.043	2.6	0.0069	0.0000	OK
180 minute winter	S10	96	76.394	0.038	2.6	0.0060	0.0000	OK
180 minute winter	S11	96	76.488	0.027	1.0	0.0042	0.0000	OK
180 minute winter	S12	96	76.348	0.053	5.1	0.0084	0.0000	OK
180 minute winter	S13	96	76.553	0.030	1.3	0.0048	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
180 minute winter	S4	Infiltration		13.1			
180 minute winter	S5	1.006	S4	13.2	1.001	0.288	0.6728
180 minute winter	S6	1.005	S5	10.9	0.849	0.257	0.4007
180 minute winter	S7	1.004	S6	9.9	0.832	0.234	0.5422
180 minute winter	S8	1.003	S7	8.8	1.035	0.093	0.1649
180 minute winter	S9	1.002	S8	2.6	0.629	0.176	0.1130
180 minute winter	S10	1.001	S9	2.6	0.683	0.138	0.0954
180 minute winter	S11	1.000	S10	1.0	0.362	0.069	0.0435
180 minute winter	S12	2.001	S8	5.1	0.927	0.261	0.1855
180 minute winter	S13	2.000	S12	1.3	0.326	0.090	0.1374

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Results for 30 year 240 minute summer. 1680 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	S4	128	73.857	-0.413	14.1	2.1188	0.0000	OK
240 minute summer	S5	128	74.752	0.086	14.1	0.0970	0.0000	OK
240 minute summer	S6	124	74.956	0.082	11.8	0.0928	0.0000	OK
240 minute summer	S7	124	75.255	0.077	10.8	0.0876	0.0000	OK
240 minute summer	S8	124	75.860	0.048	9.6	0.0077	0.0000	OK
240 minute summer	S9	124	76.122	0.045	2.9	0.0072	0.0000	OK
240 minute summer	S10	124	76.396	0.040	2.9	0.0063	0.0000	OK
240 minute summer	S11	124	76.489	0.028	1.1	0.0044	0.0000	OK
240 minute summer	S12	124	76.350	0.055	5.6	0.0088	0.0000	OK
240 minute summer	S13	124	76.554	0.031	1.4	0.0050	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
240 minute summer	S4	Infiltration		13.9			
240 minute summer	S5	1.006	S4	14.1	1.019	0.308	0.7048
240 minute summer	S6	1.005	S5	11.6	0.867	0.275	0.4194
240 minute summer	S7	1.004	S6	10.7	0.851	0.253	0.5733
240 minute summer	S8	1.003	S7	9.6	1.064	0.101	0.1752
240 minute summer	S9	1.002	S8	2.8	0.641	0.190	0.1197
240 minute summer	S10	1.001	S9	2.9	0.705	0.153	0.1017
240 minute summer	S11	1.000	S10	1.1	0.371	0.075	0.0466
240 minute summer	S12	2.001	S8	5.5	0.946	0.282	0.1966
240 minute summer	S13	2.000	S12	1.4	0.330	0.096	0.1453

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Results for 30 year 240 minute winter. 1680 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	S4	128	73.847	-0.423	10.7	1.6236	0.0000	OK
240 minute winter	S5	124	74.740	0.074	10.7	0.0839	0.0000	OK
240 minute winter	S6	128	74.945	0.071	8.9	0.0798	0.0000	OK
240 minute winter	S7	124	75.244	0.066	8.1	0.0752	0.0000	OK
240 minute winter	S8	124	75.854	0.042	7.2	0.0066	0.0000	OK
240 minute winter	S9	128	76.116	0.039	2.1	0.0061	0.0000	OK
240 minute winter	S10	124	76.390	0.034	2.1	0.0054	0.0000	OK
240 minute winter	S11	120	76.485	0.024	0.8	0.0038	0.0000	OK
240 minute winter	S12	124	76.343	0.048	4.2	0.0076	0.0000	OK
240 minute winter	S13	124	76.551	0.028	1.1	0.0044	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
240 minute winter	S4	Infiltration		10.7			
240 minute winter	S5	1.006	S4	10.7	0.945	0.234	0.5784
240 minute winter	S6	1.005	S5	8.9	0.805	0.209	0.3438
240 minute winter	S7	1.004	S6	8.1	0.789	0.190	0.4652
240 minute winter	S8	1.003	S7	7.2	0.979	0.075	0.1422
240 minute winter	S9	1.002	S8	2.1	0.592	0.142	0.0970
240 minute winter	S10	1.001	S9	2.1	0.643	0.112	0.0819
240 minute winter	S11	1.000	S10	0.8	0.344	0.055	0.0373
240 minute winter	S12	2.001	S8	4.2	0.877	0.213	0.1603
240 minute winter	S13	2.000	S12	1.1	0.314	0.075	0.1195

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Results for 30 year 360 minute summer. 1800 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	S4	192	73.846	-0.424	10.6	1.5934	0.0000	OK
360 minute summer	S5	184	74.740	0.074	10.8	0.0838	0.0000	OK
360 minute summer	S6	184	74.945	0.071	9.0	0.0802	0.0000	OK
360 minute summer	S7	184	75.245	0.067	8.2	0.0755	0.0000	OK
360 minute summer	S8	184	75.854	0.042	7.3	0.0067	0.0000	OK
360 minute summer	S9	184	76.115	0.038	2.1	0.0061	0.0000	OK
360 minute summer	S10	184	76.390	0.034	2.1	0.0054	0.0000	OK
360 minute summer	S11	184	76.485	0.024	0.8	0.0038	0.0000	OK
360 minute summer	S12	184	76.343	0.048	4.3	0.0076	0.0000	OK
360 minute summer	S13	184	76.551	0.028	1.1	0.0044	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
360 minute summer	S4	Infiltration		10.5			
360 minute summer	S5	1.006	S4	10.6	0.943	0.233	0.5770
360 minute summer	S6	1.005	S5	8.9	0.807	0.211	0.3446
360 minute summer	S7	1.004	S6	8.1	0.789	0.191	0.4685
360 minute summer	S8	1.003	S7	7.3	0.987	0.077	0.1433
360 minute summer	S9	1.002	S8	2.1	0.589	0.140	0.0959
360 minute summer	S10	1.001	S9	2.1	0.643	0.111	0.0812
360 minute summer	S11	1.000	S10	0.8	0.338	0.055	0.0372
360 minute summer	S12	2.001	S8	4.2	0.880	0.216	0.1621
360 minute summer	S13	2.000	S12	1.1	0.312	0.075	0.1205

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Results for 30 year 360 minute winter. 1800 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	S4	192	73.838	-0.432	8.2	1.2324	0.0000	OK
360 minute winter	S5	184	74.730	0.064	8.2	0.0728	0.0000	OK
360 minute winter	S6	184	74.935	0.061	6.8	0.0693	0.0000	OK
360 minute winter	S7	184	75.236	0.057	6.1	0.0650	0.0000	OK
360 minute winter	S8	192	75.848	0.036	5.4	0.0058	0.0000	OK
360 minute winter	S9	192	76.111	0.034	1.6	0.0053	0.0000	OK
360 minute winter	S10	184	76.386	0.030	1.6	0.0047	0.0000	OK
360 minute winter	S11	176	76.482	0.021	0.6	0.0033	0.0000	OK
360 minute winter	S12	192	76.336	0.041	3.1	0.0065	0.0000	OK
360 minute winter	S13	184	76.547	0.024	0.8	0.0038	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
360 minute winter	S4	Infiltration		8.1			
360 minute winter	S5	1.006	S4	8.2	0.876	0.178	0.4754
360 minute winter	S6	1.005	S5	6.8	0.749	0.160	0.2824
360 minute winter	S7	1.004	S6	6.1	0.729	0.144	0.3811
360 minute winter	S8	1.003	S7	5.4	0.908	0.057	0.1161
360 minute winter	S9	1.002	S8	1.6	0.548	0.108	0.0798
360 minute winter	S10	1.001	S9	1.6	0.595	0.085	0.0674
360 minute winter	S11	1.000	S10	0.6	0.317	0.041	0.0307
360 minute winter	S12	2.001	S8	3.1	0.807	0.159	0.1294
360 minute winter	S13	2.000	S12	0.8	0.287	0.055	0.0963

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Results for 30 year 480 minute summer. 1920 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	S4	248	73.840	-0.430	8.9	1.3446	0.0000	OK
480 minute summer	S5	248	74.733	0.067	8.9	0.0762	0.0000	OK
480 minute summer	S6	248	74.938	0.064	7.4	0.0726	0.0000	OK
480 minute summer	S7	248	75.238	0.060	6.7	0.0683	0.0000	OK
480 minute summer	S8	248	75.850	0.038	6.0	0.0061	0.0000	OK
480 minute summer	S9	248	76.113	0.036	1.8	0.0057	0.0000	OK
480 minute summer	S10	248	76.387	0.031	1.8	0.0050	0.0000	OK
480 minute summer	S11	248	76.483	0.022	0.7	0.0036	0.0000	OK
480 minute summer	S12	248	76.338	0.043	3.4	0.0068	0.0000	OK
480 minute summer	S13	248	76.548	0.025	0.9	0.0040	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
480 minute summer	S4	Infiltration		8.8			
480 minute summer	S5	1.006	S4	8.9	0.898	0.195	0.5065
480 minute summer	S6	1.005	S5	7.4	0.768	0.175	0.3010
480 minute summer	S7	1.004	S6	6.7	0.750	0.158	0.4073
480 minute summer	S8	1.003	S7	6.0	0.935	0.063	0.1246
480 minute summer	S9	1.002	S8	1.8	0.566	0.122	0.0868
480 minute summer	S10	1.001	S9	1.8	0.617	0.096	0.0733
480 minute summer	S11	1.000	S10	0.7	0.328	0.048	0.0337
480 minute summer	S12	2.001	S8	3.4	0.829	0.174	0.1383
480 minute summer	S13	2.000	S12	0.9	0.300	0.062	0.1034

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Results for 30 year 480 minute winter. 1920 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	S4	248	73.833	-0.437	6.6	1.0024	0.0000	OK
480 minute winter	S5	248	74.724	0.058	6.6	0.0653	0.0000	OK
480 minute winter	S6	248	74.929	0.055	5.5	0.0622	0.0000	OK
480 minute winter	S7	248	75.229	0.051	4.9	0.0581	0.0000	OK
480 minute winter	S8	248	75.845	0.033	4.4	0.0052	0.0000	OK
480 minute winter	S9	248	76.107	0.030	1.3	0.0048	0.0000	OK
480 minute winter	S10	240	76.383	0.027	1.3	0.0043	0.0000	OK
480 minute winter	S11	232	76.480	0.019	0.5	0.0030	0.0000	OK
480 minute winter	S12	248	76.332	0.037	2.5	0.0058	0.0000	OK
480 minute winter	S13	224	76.544	0.021	0.6	0.0033	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
480 minute winter	S4	Infiltration		6.6			
480 minute winter	S5	1.006	S4	6.6	0.825	0.144	0.4089
480 minute winter	S6	1.005	S5	5.5	0.708	0.130	0.2426
480 minute winter	S7	1.004	S6	4.9	0.685	0.116	0.3262
480 minute winter	S8	1.003	S7	4.4	0.858	0.046	0.0996
480 minute winter	S9	1.002	S8	1.3	0.516	0.088	0.0688
480 minute winter	S10	1.001	S9	1.3	0.560	0.069	0.0582
480 minute winter	S11	1.000	S10	0.5	0.305	0.034	0.0267
480 minute winter	S12	2.001	S8	2.5	0.760	0.128	0.1109
480 minute winter	S13	2.000	S12	0.6	0.271	0.041	0.0812

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Results for 30 year 600 minute summer. 2040 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	S4	315	73.835	-0.435	7.2	1.0953	0.0000	OK
600 minute summer	S5	315	74.726	0.060	7.2	0.0683	0.0000	OK
600 minute summer	S6	315	74.932	0.058	6.0	0.0651	0.0000	OK
600 minute summer	S7	315	75.232	0.054	5.4	0.0611	0.0000	OK
600 minute summer	S8	315	75.846	0.034	4.8	0.0055	0.0000	OK
600 minute summer	S9	315	76.108	0.031	1.4	0.0050	0.0000	OK
600 minute summer	S10	315	76.384	0.028	1.4	0.0044	0.0000	OK
600 minute summer	S11	315	76.480	0.019	0.5	0.0030	0.0000	OK
600 minute summer	S12	315	76.334	0.039	2.8	0.0062	0.0000	OK
600 minute summer	S13	315	76.545	0.022	0.7	0.0036	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
600 minute summer	S4	Infiltration		7.2			
600 minute summer	S5	1.006	S4	7.2	0.846	0.158	0.4350
600 minute summer	S6	1.005	S5	6.0	0.725	0.142	0.2583
600 minute summer	S7	1.004	S6	5.4	0.706	0.127	0.3489
600 minute summer	S8	1.003	S7	4.8	0.875	0.051	0.1065
600 minute summer	S9	1.002	S8	1.4	0.527	0.095	0.0726
600 minute summer	S10	1.001	S9	1.4	0.573	0.075	0.0613
600 minute summer	S11	1.000	S10	0.5	0.287	0.034	0.0276
600 minute summer	S12	2.001	S8	2.8	0.784	0.143	0.1203
600 minute summer	S13	2.000	S12	0.7	0.273	0.048	0.0889

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Results for 30 year 600 minute winter. 2040 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	S4	315	73.830	-0.440	5.6	0.8521	0.0000	OK
600 minute winter	S5	315	74.719	0.053	5.6	0.0601	0.0000	OK
600 minute winter	S6	315	74.924	0.050	4.6	0.0567	0.0000	OK
600 minute winter	S7	315	75.225	0.047	4.1	0.0532	0.0000	OK
600 minute winter	S8	315	75.842	0.030	3.7	0.0048	0.0000	OK
600 minute winter	S9	315	76.105	0.028	1.1	0.0044	0.0000	OK
600 minute winter	S10	315	76.381	0.025	1.1	0.0039	0.0000	OK
600 minute winter	S11	285	76.478	0.017	0.4	0.0027	0.0000	OK
600 minute winter	S12	315	76.328	0.033	2.1	0.0053	0.0000	OK
600 minute winter	S13	285	76.542	0.019	0.5	0.0030	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
600 minute winter	S4	Infiltration		5.6			
600 minute winter	S5	1.006	S4	5.6	0.787	0.123	0.3636
600 minute winter	S6	1.005	S5	4.6	0.671	0.109	0.2142
600 minute winter	S7	1.004	S6	4.1	0.653	0.097	0.2865
600 minute winter	S8	1.003	S7	3.7	0.818	0.039	0.0878
600 minute winter	S9	1.002	S8	1.1	0.491	0.074	0.0612
600 minute winter	S10	1.001	S9	1.1	0.534	0.059	0.0517
600 minute winter	S11	1.000	S10	0.4	0.281	0.028	0.0234
600 minute winter	S12	2.001	S8	2.1	0.723	0.107	0.0979
600 minute winter	S13	2.000	S12	0.5	0.253	0.034	0.0716

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Results for 30 year 720 minute summer. 2160 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	S4	375	73.832	-0.438	6.4	0.9736	0.0000	OK
720 minute summer	S5	375	74.723	0.057	6.4	0.0643	0.0000	OK
720 minute summer	S6	375	74.928	0.054	5.3	0.0610	0.0000	OK
720 minute summer	S7	375	75.229	0.051	4.8	0.0576	0.0000	OK
720 minute summer	S8	375	75.845	0.033	4.3	0.0052	0.0000	OK
720 minute summer	S9	375	76.107	0.030	1.3	0.0048	0.0000	OK
720 minute summer	S10	375	76.383	0.027	1.3	0.0043	0.0000	OK
720 minute summer	S11	375	76.480	0.019	0.5	0.0030	0.0000	OK
720 minute summer	S12	375	76.331	0.036	2.4	0.0057	0.0000	OK
720 minute summer	S13	375	76.544	0.021	0.6	0.0033	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
720 minute summer	S4	Infiltration		6.4			
720 minute summer	S5	1.006	S4	6.4	0.818	0.140	0.4000
720 minute summer	S6	1.005	S5	5.3	0.699	0.125	0.2367
720 minute summer	S7	1.004	S6	4.8	0.685	0.113	0.3196
720 minute summer	S8	1.003	S7	4.3	0.850	0.045	0.0982
720 minute summer	S9	1.002	S8	1.3	0.516	0.088	0.0688
720 minute summer	S10	1.001	S9	1.3	0.560	0.069	0.0582
720 minute summer	S11	1.000	S10	0.5	0.296	0.034	0.0267
720 minute summer	S12	2.001	S8	2.4	0.751	0.123	0.1077
720 minute summer	S13	2.000	S12	0.6	0.261	0.041	0.0796

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Results for 30 year 720 minute winter. 2160 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	S4	375	73.827	-0.443	4.9	0.7456	0.0000	OK
720 minute winter	S5	375	74.716	0.050	4.9	0.0562	0.0000	OK
720 minute winter	S6	375	74.921	0.047	4.1	0.0536	0.0000	OK
720 minute winter	S7	375	75.223	0.045	3.7	0.0505	0.0000	OK
720 minute winter	S8	375	75.841	0.029	3.3	0.0046	0.0000	OK
720 minute winter	S9	375	76.104	0.027	1.0	0.0042	0.0000	OK
720 minute winter	S10	375	76.380	0.024	1.0	0.0037	0.0000	OK
720 minute winter	S11	375	76.478	0.017	0.4	0.0027	0.0000	OK
720 minute winter	S12	375	76.327	0.032	1.9	0.0051	0.0000	OK
720 minute winter	S13	360	76.542	0.019	0.5	0.0030	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
720 minute winter	S4	Infiltration		4.9			
720 minute winter	S5	1.006	S4	4.9	0.758	0.107	0.3305
720 minute winter	S6	1.005	S5	4.1	0.653	0.097	0.1960
720 minute winter	S7	1.004	S6	3.7	0.636	0.087	0.2653
720 minute winter	S8	1.003	S7	3.3	0.786	0.035	0.0815
720 minute winter	S9	1.002	S8	1.0	0.478	0.068	0.0572
720 minute winter	S10	1.001	S9	1.0	0.518	0.053	0.0483
720 minute winter	S11	1.000	S10	0.4	0.281	0.028	0.0225
720 minute winter	S12	2.001	S8	1.9	0.702	0.097	0.0912
720 minute winter	S13	2.000	S12	0.5	0.259	0.034	0.0682

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Results for 30 year 960 minute summer. 2400 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	S4	495	73.829	-0.441	5.3	0.8063	0.0000	OK
960 minute summer	S5	495	74.718	0.052	5.3	0.0585	0.0000	OK
960 minute summer	S6	495	74.923	0.049	4.4	0.0555	0.0000	OK
960 minute summer	S7	495	75.224	0.046	3.9	0.0518	0.0000	OK
960 minute summer	S8	495	75.842	0.030	3.5	0.0047	0.0000	OK
960 minute summer	S9	495	76.104	0.027	1.0	0.0042	0.0000	OK
960 minute summer	S10	495	76.380	0.024	1.0	0.0037	0.0000	OK
960 minute summer	S11	495	76.478	0.017	0.4	0.0027	0.0000	OK
960 minute summer	S12	495	76.328	0.033	2.0	0.0052	0.0000	OK
960 minute summer	S13	480	76.542	0.019	0.5	0.0030	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
960 minute summer	S4	Infiltration		5.3			
960 minute summer	S5	1.006	S4	5.3	0.775	0.116	0.3496
960 minute summer	S6	1.005	S5	4.4	0.665	0.104	0.2067
960 minute summer	S7	1.004	S6	3.9	0.642	0.092	0.2771
960 minute summer	S8	1.003	S7	3.5	0.803	0.037	0.0846
960 minute summer	S9	1.002	S8	1.0	0.478	0.068	0.0572
960 minute summer	S10	1.001	S9	1.0	0.518	0.053	0.0483
960 minute summer	S11	1.000	S10	0.4	0.281	0.028	0.0225
960 minute summer	S12	2.001	S8	2.0	0.713	0.102	0.0946
960 minute summer	S13	2.000	S12	0.5	0.259	0.034	0.0699

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Results for 30 year 960 minute winter. 2400 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	S4	495	73.824	-0.446	4.0	0.6087	0.0000	OK
960 minute winter	S5	480	74.711	0.045	4.0	0.0508	0.0000	OK
960 minute winter	S6	480	74.916	0.042	3.3	0.0480	0.0000	OK
960 minute winter	S7	480	75.218	0.040	2.9	0.0449	0.0000	OK
960 minute winter	S8	480	75.838	0.026	2.6	0.0041	0.0000	OK
960 minute winter	S9	480	76.101	0.024	0.8	0.0038	0.0000	OK
960 minute winter	S10	480	76.377	0.021	0.8	0.0034	0.0000	OK
960 minute winter	S11	450	76.476	0.015	0.3	0.0024	0.0000	OK
960 minute winter	S12	465	76.323	0.028	1.5	0.0045	0.0000	OK
960 minute winter	S13	465	76.540	0.017	0.4	0.0027	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
960 minute winter	S4	Infiltration		4.0			
960 minute winter	S5	1.006	S4	4.0	0.714	0.088	0.2862
960 minute winter	S6	1.005	S5	3.3	0.611	0.078	0.1686
960 minute winter	S7	1.004	S6	2.9	0.587	0.068	0.2251
960 minute winter	S8	1.003	S7	2.6	0.733	0.027	0.0688
960 minute winter	S9	1.002	S8	0.8	0.448	0.054	0.0488
960 minute winter	S10	1.001	S9	0.8	0.486	0.043	0.0412
960 minute winter	S11	1.000	S10	0.3	0.265	0.021	0.0189
960 minute winter	S12	2.001	S8	1.5	0.655	0.077	0.0771
960 minute winter	S13	2.000	S12	0.4	0.239	0.028	0.0579

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Results for 30 year 1440 minute summer. 2880 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	S4	750	73.824	-0.446	4.0	0.6087	0.0000	OK
1440 minute summer	S5	750	74.711	0.045	4.0	0.0508	0.0000	OK
1440 minute summer	S6	750	74.916	0.042	3.3	0.0480	0.0000	OK
1440 minute summer	S7	750	75.218	0.040	2.9	0.0449	0.0000	OK
1440 minute summer	S8	750	75.838	0.026	2.6	0.0041	0.0000	OK
1440 minute summer	S9	750	76.101	0.024	0.8	0.0038	0.0000	OK
1440 minute summer	S10	750	76.377	0.021	0.8	0.0034	0.0000	OK
1440 minute summer	S11	750	76.476	0.015	0.3	0.0024	0.0000	OK
1440 minute summer	S12	750	76.323	0.028	1.5	0.0045	0.0000	OK
1440 minute summer	S13	750	76.540	0.017	0.4	0.0027	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
1440 minute summer	S4	Infiltration		4.0			
1440 minute summer	S5	1.006	S4	4.0	0.714	0.088	0.2862
1440 minute summer	S6	1.005	S5	3.3	0.611	0.078	0.1686
1440 minute summer	S7	1.004	S6	2.9	0.587	0.068	0.2251
1440 minute summer	S8	1.003	S7	2.6	0.733	0.027	0.0688
1440 minute summer	S9	1.002	S8	0.8	0.448	0.054	0.0488
1440 minute summer	S10	1.001	S9	0.8	0.486	0.043	0.0412
1440 minute summer	S11	1.000	S10	0.3	0.251	0.021	0.0189
1440 minute summer	S12	2.001	S8	1.5	0.655	0.077	0.0771
1440 minute summer	S13	2.000	S12	0.4	0.239	0.028	0.0579

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Results for 30 year 1440 minute winter. 2880 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	S4	690	73.820	-0.450	2.8	0.4261	0.0000	OK
1440 minute winter	S5	690	74.704	0.038	2.8	0.0427	0.0000	OK
1440 minute winter	S6	690	74.909	0.035	2.3	0.0401	0.0000	OK
1440 minute winter	S7	690	75.211	0.033	2.0	0.0374	0.0000	OK
1440 minute winter	S8	690	75.834	0.022	1.8	0.0034	0.0000	OK
1440 minute winter	S9	630	76.096	0.019	0.5	0.0030	0.0000	OK
1440 minute winter	S10	630	76.373	0.017	0.5	0.0027	0.0000	OK
1440 minute winter	S11	630	76.473	0.012	0.2	0.0020	0.0000	OK
1440 minute winter	S12	690	76.319	0.024	1.1	0.0039	0.0000	OK
1440 minute winter	S13	690	76.538	0.015	0.3	0.0024	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
1440 minute winter	S4	Infiltration		2.8			
1440 minute winter	S5	1.006	S4	2.8	0.643	0.061	0.2227
1440 minute winter	S6	1.005	S5	2.3	0.550	0.054	0.1306
1440 minute winter	S7	1.004	S6	2.0	0.526	0.047	0.1734
1440 minute winter	S8	1.003	S7	1.8	0.659	0.019	0.0530
1440 minute winter	S9	1.002	S8	0.5	0.389	0.034	0.0351
1440 minute winter	S10	1.001	S9	0.5	0.422	0.027	0.0297
1440 minute winter	S11	1.000	S10	0.2	0.228	0.014	0.0138
1440 minute winter	S12	2.001	S8	1.1	0.598	0.056	0.0619
1440 minute winter	S13	2.000	S12	0.3	0.222	0.021	0.0467

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Results for 100 year +30% CC 15 minute summer. 1455 minute analysis at 1 minute timestep. Mass balance: 99.93%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	S4	18	74.256	-0.014	60.1	20.3016	0.0000	OK
15 minute summer	S5	12	75.135	0.469	61.5	0.5304	0.0000	SURCHARGED
15 minute summer	S6	12	75.486	0.612	51.7	0.6925	0.0000	SURCHARGED
15 minute summer	S7	12	75.919	0.741	52.7	0.8377	0.0000	SURCHARGED
15 minute summer	S8	12	76.081	0.269	48.4	0.0428	0.0000	SURCHARGED
15 minute summer	S9	11	76.215	0.138	15.5	0.0220	0.0000	OK
15 minute summer	S10	10	76.464	0.108	15.6	0.0171	0.0000	OK
15 minute summer	S11	10	76.528	0.067	6.0	0.0106	0.0000	OK
15 minute summer	S12	12	76.876	0.581	28.6	0.0924	0.0000	SURCHARGED
15 minute summer	S13	12	76.929	0.406	7.9	0.0646	0.0000	FLOOD RISK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute summer	S4	Infiltration		19.4			
15 minute summer	S5	1.006	S4	60.1	1.512	1.315	1.9696
15 minute summer	S6	1.005	S5	50.8	1.276	1.199	1.2416
15 minute summer	S7	1.004	S6	47.2	1.186	1.114	1.8128
15 minute summer	S8	1.003	S7	46.5	1.461	0.490	0.7619
15 minute summer	S9	1.002	S8	15.2	0.958	1.027	0.4657
15 minute summer	S10	1.001	S9	15.5	1.065	0.828	0.3742
15 minute summer	S11	1.000	S10	6.0	0.563	0.411	0.1652
15 minute summer	S12	2.001	S8	26.7	1.515	1.364	0.5932
15 minute summer	S13	2.000	S12	7.9	0.474	0.547	0.5974

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Results for 100 year +30% CC 15 minute winter. 1455 minute analysis at 1 minute timestep. Mass balance: 99.89%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S4	19	74.341	0.071	62.0	23.3949	0.0000	OK
15 minute winter	S5	12	75.190	0.524	63.6	0.5921	0.0000	SURCHARGED
15 minute winter	S6	12	75.557	0.683	53.0	0.7720	0.0000	SURCHARGED
15 minute winter	S7	12	75.998	0.820	53.2	0.9278	0.0000	SURCHARGED
15 minute winter	S8	12	76.168	0.356	50.4	0.0567	0.0000	SURCHARGED
15 minute winter	S9	12	76.329	0.252	16.3	0.0400	0.0000	SURCHARGED
15 minute winter	S10	10	76.468	0.112	16.4	0.0178	0.0000	OK
15 minute winter	S11	10	76.530	0.069	6.3	0.0109	0.0000	OK
15 minute winter	S12	12	76.990	0.695	29.7	0.1105	0.0000	FLOOD RISK
15 minute winter	S13	12	77.047	0.524	8.3	0.0834	0.0000	FLOOD RISK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute winter	S4	Infiltration		20.0			
15 minute winter	S5	1.006	S4	62.0	1.561	1.358	1.9767
15 minute winter	S6	1.005	S5	52.1	1.310	1.231	1.2416
15 minute winter	S7	1.004	S6	47.8	1.202	1.129	1.8128
15 minute winter	S8	1.003	S7	46.4	1.464	0.488	0.7619
15 minute winter	S9	1.002	S8	15.8	0.955	1.067	0.4810
15 minute winter	S10	1.001	S9	16.3	1.062	0.869	0.3855
15 minute winter	S11	1.000	S10	6.3	0.575	0.431	0.1714
15 minute winter	S12	2.001	S8	27.8	1.577	1.420	0.5932
15 minute winter	S13	2.000	S12	8.1	0.460	0.557	0.5974

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Results for 100 year +30% CC 30 minute summer. 1470 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	S4	26	74.339	0.069	59.6	23.3600	0.0000	OK
30 minute summer	S5	20	75.119	0.453	60.7	0.5124	0.0000	SURCHARGED
30 minute summer	S6	20	75.466	0.592	51.0	0.6696	0.0000	SURCHARGED
30 minute summer	S7	20	75.878	0.700	50.6	0.7914	0.0000	SURCHARGED
30 minute summer	S8	20	76.019	0.207	46.1	0.0329	0.0000	OK
30 minute summer	S9	18	76.204	0.127	14.8	0.0201	0.0000	OK
30 minute summer	S10	18	76.459	0.103	14.7	0.0163	0.0000	OK
30 minute summer	S11	18	76.525	0.064	5.6	0.0102	0.0000	OK
30 minute summer	S12	19	76.807	0.512	26.9	0.0814	0.0000	SURCHARGED
30 minute summer	S13	19	76.860	0.337	7.3	0.0536	0.0000	FLOOD RISK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
30 minute summer	S4	Infiltration		20.0			
30 minute summer	S5	1.006	S4	59.6	1.501	1.304	1.9679
30 minute summer	S6	1.005	S5	50.3	1.266	1.189	1.2416
30 minute summer	S7	1.004	S6	46.5	1.169	1.097	1.8128
30 minute summer	S8	1.003	S7	44.6	1.441	0.470	0.7474
30 minute summer	S9	1.002	S8	14.4	0.959	0.973	0.4125
30 minute summer	S10	1.001	S9	14.8	1.040	0.787	0.3588
30 minute summer	S11	1.000	S10	5.6	0.555	0.386	0.1572
30 minute summer	S12	2.001	S8	25.9	1.469	1.323	0.5845
30 minute summer	S13	2.000	S12	7.7	0.453	0.529	0.5974

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Results for 100 year +30% CC 30 minute winter. 1470 minute analysis at 1 minute timestep. Mass balance: 99.94%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	S4	27	74.510	0.240	58.0	26.4512	0.0000	OK
30 minute winter	S5	20	75.074	0.408	58.6	0.4618	0.0000	SURCHARGED
30 minute winter	S6	20	75.400	0.526	49.1	0.5950	0.0000	SURCHARGED
30 minute winter	S7	20	75.792	0.614	47.5	0.6943	0.0000	SURCHARGED
30 minute winter	S8	20	75.947	0.135	42.8	0.0215	0.0000	OK
30 minute winter	S9	18	76.193	0.116	13.3	0.0184	0.0000	OK
30 minute winter	S10	18	76.452	0.096	13.3	0.0152	0.0000	OK
30 minute winter	S11	18	76.522	0.061	5.1	0.0097	0.0000	OK
30 minute winter	S12	19	76.697	0.402	24.8	0.0639	0.0000	SURCHARGED
30 minute winter	S13	19	76.742	0.219	6.6	0.0349	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
30 minute winter	S4	Infiltration		20.0			
30 minute winter	S5	1.006	S4	58.0	1.460	1.269	1.9612
30 minute winter	S6	1.005	S5	48.7	1.224	1.150	1.2416
30 minute winter	S7	1.004	S6	45.0	1.133	1.063	1.8128
30 minute winter	S8	1.003	S7	42.3	1.439	0.445	0.6197
30 minute winter	S9	1.002	S8	13.1	0.942	0.889	0.3812
30 minute winter	S10	1.001	S9	13.3	1.016	0.709	0.3297
30 minute winter	S11	1.000	S10	5.1	0.548	0.352	0.1454
30 minute winter	S12	2.001	S8	24.2	1.372	1.235	0.5817
30 minute winter	S13	2.000	S12	6.9	0.443	0.478	0.5974

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Results for 100 year +30% CC 60 minute summer. 1500 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	S4	43	74.320	0.050	50.4	23.0013	0.0000	OK
60 minute summer	S5	35	74.915	0.249	52.9	0.2816	0.0000	SURCHARGED
60 minute summer	S6	35	75.162	0.288	45.3	0.3261	0.0000	SURCHARGED
60 minute summer	S7	35	75.459	0.281	42.0	0.3181	0.0000	SURCHARGED
60 minute summer	S8	34	75.910	0.098	37.5	0.0155	0.0000	OK
60 minute summer	S9	33	76.178	0.101	11.3	0.0161	0.0000	OK
60 minute summer	S10	33	76.441	0.085	11.3	0.0136	0.0000	OK
60 minute summer	S11	33	76.517	0.056	4.3	0.0089	0.0000	OK
60 minute summer	S12	34	76.524	0.229	22.4	0.0364	0.0000	SURCHARGED
60 minute summer	S13	33	76.588	0.065	5.7	0.0103	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
60 minute summer	S4	Infiltration		20.0			
60 minute summer	S5	1.006	S4	50.4	1.338	1.102	1.9158
60 minute summer	S6	1.005	S5	42.9	1.126	1.013	1.2416
60 minute summer	S7	1.004	S6	41.2	1.122	0.974	1.8128
60 minute summer	S8	1.003	S7	37.5	1.430	0.395	0.5341
60 minute summer	S9	1.002	S8	11.2	0.908	0.758	0.3375
60 minute summer	S10	1.001	S9	11.3	0.989	0.602	0.2873
60 minute summer	S11	1.000	S10	4.3	0.529	0.297	0.1276
60 minute summer	S12	2.001	S8	21.5	1.232	1.099	0.5744
60 minute summer	S13	2.000	S12	5.7	0.439	0.393	0.4228

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Results for 100 year +30% CC 60 minute winter. 1500 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	S4	46	74.426	0.156	45.9	24.9306	0.0000	OK
60 minute winter	S5	35	74.854	0.188	46.2	0.2125	0.0000	OK
60 minute winter	S6	34	75.052	0.178	38.3	0.2014	0.0000	OK
60 minute winter	S7	33	75.337	0.159	35.1	0.1800	0.0000	OK
60 minute winter	S8	33	75.900	0.088	31.3	0.0141	0.0000	OK
60 minute winter	S9	33	76.165	0.088	9.2	0.0140	0.0000	OK
60 minute winter	S10	33	76.431	0.075	9.2	0.0119	0.0000	OK
60 minute winter	S11	33	76.511	0.050	3.5	0.0080	0.0000	OK
60 minute winter	S12	33	76.414	0.119	18.1	0.0189	0.0000	OK
60 minute winter	S13	33	76.581	0.058	4.6	0.0092	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
60 minute winter	S4	Infiltration		20.0			
60 minute winter	S5	1.006	S4	45.9	1.325	1.005	1.7709
60 minute winter	S6	1.005	S5	38.3	1.111	0.904	1.0769
60 minute winter	S7	1.004	S6	35.0	1.101	0.827	1.4513
60 minute winter	S8	1.003	S7	31.3	1.398	0.329	0.4261
60 minute winter	S9	1.002	S8	9.2	0.871	0.620	0.2876
60 minute winter	S10	1.001	S9	9.2	0.943	0.490	0.2440
60 minute winter	S11	1.000	S10	3.5	0.505	0.241	0.1089
60 minute winter	S12	2.001	S8	18.0	1.235	0.922	0.4922
60 minute winter	S13	2.000	S12	4.6	0.429	0.317	0.3601

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Results for 100 year +30% CC 120 minute summer. 1560 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	S4	76	74.217	-0.053	37.9	18.5360	0.0000	OK
120 minute summer	S5	64	74.824	0.158	38.4	0.1784	0.0000	OK
120 minute summer	S6	64	75.026	0.152	31.9	0.1721	0.0000	OK
120 minute summer	S7	64	75.318	0.140	29.1	0.1578	0.0000	OK
120 minute summer	S8	64	75.892	0.080	26.0	0.0127	0.0000	OK
120 minute summer	S9	64	76.155	0.078	7.6	0.0124	0.0000	OK
120 minute summer	S10	64	76.423	0.067	7.6	0.0106	0.0000	OK
120 minute summer	S11	64	76.506	0.045	2.9	0.0072	0.0000	OK
120 minute summer	S12	64	76.397	0.102	15.0	0.0162	0.0000	OK
120 minute summer	S13	64	76.575	0.052	3.8	0.0083	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
120 minute summer	S4	Infiltration		18.9			
120 minute summer	S5	1.006	S4	37.9	1.291	0.829	1.4997
120 minute summer	S6	1.005	S5	31.7	1.087	0.749	0.9102
120 minute summer	S7	1.004	S6	29.1	1.068	0.686	1.2403
120 minute summer	S8	1.003	S7	26.0	1.352	0.274	0.3687
120 minute summer	S9	1.002	S8	7.6	0.834	0.514	0.2489
120 minute summer	S10	1.001	S9	7.6	0.905	0.405	0.2105
120 minute summer	S11	1.000	S10	2.9	0.484	0.200	0.0943
120 minute summer	S12	2.001	S8	15.0	1.203	0.766	0.4199
120 minute summer	S13	2.000	S12	3.8	0.420	0.262	0.3083

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Results for 100 year +30% CC 120 minute winter. 1560 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	S4	80	74.195	-0.075	29.6	17.5433	0.0000	OK
120 minute winter	S5	64	74.799	0.133	29.7	0.1500	0.0000	OK
120 minute winter	S6	64	75.001	0.127	24.5	0.1439	0.0000	OK
120 minute winter	S7	64	75.296	0.118	22.3	0.1330	0.0000	OK
120 minute winter	S8	64	75.882	0.070	19.9	0.0111	0.0000	OK
120 minute winter	S9	64	76.144	0.067	5.8	0.0106	0.0000	OK
120 minute winter	S10	64	76.413	0.057	5.8	0.0091	0.0000	OK
120 minute winter	S11	62	76.500	0.039	2.2	0.0063	0.0000	OK
120 minute winter	S12	64	76.380	0.085	11.5	0.0135	0.0000	OK
120 minute winter	S13	66	76.568	0.045	2.9	0.0072	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
120 minute winter	S4	Infiltration		18.7			
120 minute winter	S5	1.006	S4	29.6	1.228	0.647	1.2310
120 minute winter	S6	1.005	S5	24.5	1.031	0.578	0.7412
120 minute winter	S7	1.004	S6	22.3	1.011	0.526	1.0055
120 minute winter	S8	1.003	S7	19.9	1.275	0.210	0.3009
120 minute winter	S9	1.002	S8	5.8	0.780	0.393	0.2032
120 minute winter	S10	1.001	S9	5.8	0.846	0.309	0.1715
120 minute winter	S11	1.000	S10	2.2	0.453	0.152	0.0771
120 minute winter	S12	2.001	S8	11.5	1.139	0.588	0.3403
120 minute winter	S13	2.000	S12	2.9	0.399	0.200	0.2505

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Results for 100 year +30% CC 180 minute summer. 1620 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	S4	108	74.110	-0.160	29.0	13.6460	0.0000	OK
180 minute summer	S5	96	74.797	0.131	29.0	0.1480	0.0000	OK
180 minute summer	S6	96	75.000	0.126	24.0	0.1420	0.0000	OK
180 minute summer	S7	96	75.294	0.116	21.9	0.1316	0.0000	OK
180 minute summer	S8	96	75.881	0.069	19.5	0.0110	0.0000	OK
180 minute summer	S9	96	76.143	0.066	5.7	0.0105	0.0000	OK
180 minute summer	S10	96	76.413	0.057	5.7	0.0090	0.0000	OK
180 minute summer	S11	96	76.500	0.039	2.2	0.0063	0.0000	OK
180 minute summer	S12	96	76.379	0.084	11.3	0.0134	0.0000	OK
180 minute summer	S13	96	76.568	0.045	2.9	0.0072	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
180 minute summer	S4	Infiltration		17.8			
180 minute summer	S5	1.006	S4	29.0	1.222	0.634	1.2112
180 minute summer	S6	1.005	S5	24.0	1.027	0.567	0.7293
180 minute summer	S7	1.004	S6	21.9	1.008	0.517	0.9906
180 minute summer	S8	1.003	S7	19.5	1.267	0.205	0.2967
180 minute summer	S9	1.002	S8	5.7	0.776	0.386	0.2006
180 minute summer	S10	1.001	S9	5.7	0.845	0.304	0.1692
180 minute summer	S11	1.000	S10	2.2	0.453	0.152	0.0764
180 minute summer	S12	2.001	S8	11.3	1.134	0.578	0.3358
180 minute summer	S13	2.000	S12	2.9	0.400	0.200	0.2481

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Results for 100 year +30% CC 180 minute winter. 1620 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	S4	112	74.047	-0.223	22.4	10.7694	0.0000	OK
180 minute winter	S5	96	74.778	0.112	22.4	0.1263	0.0000	OK
180 minute winter	S6	96	74.981	0.107	18.5	0.1208	0.0000	OK
180 minute winter	S7	96	75.277	0.099	16.8	0.1123	0.0000	OK
180 minute winter	S8	96	75.872	0.060	15.0	0.0096	0.0000	OK
180 minute winter	S9	96	76.134	0.057	4.4	0.0091	0.0000	OK
180 minute winter	S10	96	76.405	0.049	4.4	0.0078	0.0000	OK
180 minute winter	S11	96	76.496	0.035	1.7	0.0055	0.0000	OK
180 minute winter	S12	96	76.367	0.072	8.7	0.0114	0.0000	OK
180 minute winter	S13	96	76.562	0.039	2.2	0.0063	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
180 minute winter	S4	Infiltration		17.1			
180 minute winter	S5	1.006	S4	22.4	1.149	0.490	0.9953
180 minute winter	S6	1.005	S5	18.5	0.968	0.437	0.5964
180 minute winter	S7	1.004	S6	16.8	0.949	0.397	0.8074
180 minute winter	S8	1.003	S7	15.0	1.192	0.158	0.2433
180 minute winter	S9	1.002	S8	4.4	0.726	0.298	0.1657
180 minute winter	S10	1.001	S9	4.4	0.788	0.234	0.1398
180 minute winter	S11	1.000	S10	1.7	0.422	0.117	0.0634
180 minute winter	S12	2.001	S8	8.7	1.065	0.445	0.2752
180 minute winter	S13	2.000	S12	2.2	0.372	0.152	0.2031

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Results for 100 year +30% CC 240 minute summer. 1680 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	S4	140	74.028	-0.242	23.8	9.9017	0.0000	OK
240 minute summer	S5	124	74.782	0.116	24.0	0.1308	0.0000	OK
240 minute summer	S6	124	74.985	0.111	19.9	0.1256	0.0000	OK
240 minute summer	S7	124	75.282	0.104	18.2	0.1174	0.0000	OK
240 minute summer	S8	124	75.875	0.063	16.2	0.0100	0.0000	OK
240 minute summer	S9	124	76.136	0.059	4.8	0.0094	0.0000	OK
240 minute summer	S10	124	76.407	0.051	4.8	0.0082	0.0000	OK
240 minute summer	S11	124	76.497	0.036	1.8	0.0057	0.0000	OK
240 minute summer	S12	124	76.370	0.075	9.5	0.0119	0.0000	OK
240 minute summer	S13	124	76.564	0.041	2.4	0.0065	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
240 minute summer	S4	Infiltration		16.8			
240 minute summer	S5	1.006	S4	23.8	1.167	0.520	1.0403
240 minute summer	S6	1.005	S5	19.7	0.983	0.465	0.6254
240 minute summer	S7	1.004	S6	18.1	0.967	0.427	0.8522
240 minute summer	S8	1.003	S7	16.2	1.216	0.171	0.2575
240 minute summer	S9	1.002	S8	4.7	0.739	0.320	0.1746
240 minute summer	S10	1.001	S9	4.8	0.807	0.254	0.1478
240 minute summer	S11	1.000	S10	1.8	0.424	0.124	0.0667
240 minute summer	S12	2.001	S8	9.4	1.085	0.480	0.2918
240 minute summer	S13	2.000	S12	2.4	0.380	0.165	0.2156

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Results for 100 year +30% CC 240 minute winter. 1680 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	S4	140	73.936	-0.334	18.3	5.7088	0.0000	OK
240 minute winter	S5	124	74.765	0.099	18.4	0.1124	0.0000	OK
240 minute winter	S6	124	74.969	0.095	15.2	0.1075	0.0000	OK
240 minute winter	S7	124	75.267	0.089	13.8	0.1003	0.0000	OK
240 minute winter	S8	124	75.866	0.054	12.3	0.0087	0.0000	OK
240 minute winter	S9	128	76.128	0.051	3.6	0.0081	0.0000	OK
240 minute winter	S10	124	76.400	0.044	3.6	0.0071	0.0000	OK
240 minute winter	S11	124	76.492	0.031	1.4	0.0050	0.0000	OK
240 minute winter	S12	124	76.359	0.064	7.1	0.0101	0.0000	OK
240 minute winter	S13	128	76.559	0.036	1.8	0.0057	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
240 minute winter	S4	Infiltration		15.8			
240 minute winter	S5	1.006	S4	18.3	1.092	0.400	0.8564
240 minute winter	S6	1.005	S5	15.2	0.924	0.358	0.5123
240 minute winter	S7	1.004	S6	13.8	0.905	0.325	0.6940
240 minute winter	S8	1.003	S7	12.3	1.132	0.129	0.2100
240 minute winter	S9	1.002	S8	3.6	0.687	0.244	0.1431
240 minute winter	S10	1.001	S9	3.6	0.747	0.192	0.1208
240 minute winter	S11	1.000	S10	1.4	0.401	0.097	0.0550
240 minute winter	S12	2.001	S8	7.1	1.011	0.362	0.2362
240 minute winter	S13	2.000	S12	1.8	0.357	0.124	0.1747

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Results for 100 year +30% CC 360 minute summer. 1800 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	S4	200	73.903	-0.367	17.9	4.2133	0.0000	OK
360 minute summer	S5	184	74.764	0.098	18.2	0.1112	0.0000	OK
360 minute summer	S6	184	74.968	0.094	15.1	0.1068	0.0000	OK
360 minute summer	S7	184	75.267	0.089	13.8	0.1003	0.0000	OK
360 minute summer	S8	184	75.867	0.055	12.3	0.0087	0.0000	OK
360 minute summer	S9	184	76.128	0.051	3.7	0.0082	0.0000	OK
360 minute summer	S10	184	76.401	0.045	3.7	0.0071	0.0000	OK
360 minute summer	S11	184	76.492	0.031	1.4	0.0050	0.0000	OK
360 minute summer	S12	184	76.359	0.064	7.2	0.0101	0.0000	OK
360 minute summer	S13	184	76.558	0.035	1.8	0.0056	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
360 minute summer	S4	Infiltration		15.5			
360 minute summer	S5	1.006	S4	17.9	1.085	0.392	0.8439
360 minute summer	S6	1.005	S5	15.0	0.922	0.354	0.5067
360 minute summer	S7	1.004	S6	13.7	0.905	0.324	0.6910
360 minute summer	S8	1.003	S7	12.3	1.136	0.130	0.2101
360 minute summer	S9	1.002	S8	3.6	0.688	0.246	0.1441
360 minute summer	S10	1.001	S9	3.7	0.753	0.196	0.1220
360 minute summer	S11	1.000	S10	1.4	0.396	0.096	0.0555
360 minute summer	S12	2.001	S8	7.1	1.012	0.364	0.2370
360 minute summer	S13	2.000	S12	1.8	0.352	0.123	0.1750

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Results for 100 year +30% CC 360 minute winter. 1800 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	S4	192	73.855	-0.415	13.4	2.0310	0.0000	OK
360 minute winter	S5	184	74.750	0.084	13.5	0.0947	0.0000	OK
360 minute winter	S6	184	74.954	0.080	11.1	0.0900	0.0000	OK
360 minute winter	S7	184	75.253	0.075	10.1	0.0847	0.0000	OK
360 minute winter	S8	184	75.859	0.047	9.0	0.0074	0.0000	OK
360 minute winter	S9	192	76.120	0.043	2.6	0.0069	0.0000	OK
360 minute winter	S10	184	76.394	0.038	2.6	0.0060	0.0000	OK
360 minute winter	S11	184	76.488	0.027	1.0	0.0042	0.0000	OK
360 minute winter	S12	184	76.349	0.054	5.2	0.0085	0.0000	OK
360 minute winter	S13	184	76.553	0.030	1.3	0.0048	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
360 minute winter	S4	Infiltration		13.3			
360 minute winter	S5	1.006	S4	13.4	1.006	0.294	0.6821
360 minute winter	S6	1.005	S5	11.1	0.851	0.261	0.4057
360 minute winter	S7	1.004	S6	10.1	0.837	0.238	0.5489
360 minute winter	S8	1.003	S7	9.0	1.042	0.095	0.1672
360 minute winter	S9	1.002	S8	2.6	0.629	0.176	0.1130
360 minute winter	S10	1.001	S9	2.6	0.682	0.138	0.0954
360 minute winter	S11	1.000	S10	1.0	0.362	0.069	0.0435
360 minute winter	S12	2.001	S8	5.2	0.931	0.265	0.1879
360 minute winter	S13	2.000	S12	1.3	0.326	0.090	0.1387

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Results for 100 year +30% CC 480 minute summer. 1920 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	S4	248	73.859	-0.411	14.6	2.2109	0.0000	OK
480 minute summer	S5	248	74.754	0.088	14.6	0.0991	0.0000	OK
480 minute summer	S6	248	74.958	0.084	12.1	0.0946	0.0000	OK
480 minute summer	S7	248	75.256	0.078	11.0	0.0887	0.0000	OK
480 minute summer	S8	248	75.861	0.049	9.8	0.0077	0.0000	OK
480 minute summer	S9	248	76.123	0.046	2.9	0.0073	0.0000	OK
480 minute summer	S10	248	76.396	0.040	2.9	0.0063	0.0000	OK
480 minute summer	S11	248	76.489	0.028	1.1	0.0044	0.0000	OK
480 minute summer	S12	248	76.351	0.056	5.6	0.0089	0.0000	OK
480 minute summer	S13	248	76.554	0.031	1.4	0.0050	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
480 minute summer	S4	Infiltration		14.5			
480 minute summer	S5	1.006	S4	14.6	1.029	0.320	0.7251
480 minute summer	S6	1.005	S5	12.1	0.873	0.286	0.4326
480 minute summer	S7	1.004	S6	11.0	0.855	0.260	0.5862
480 minute summer	S8	1.003	S7	9.8	1.067	0.103	0.1781
480 minute summer	S9	1.002	S8	2.9	0.648	0.196	0.1223
480 minute summer	S10	1.001	S9	2.9	0.704	0.154	0.1032
480 minute summer	S11	1.000	S10	1.1	0.371	0.076	0.0469
480 minute summer	S12	2.001	S8	5.6	0.950	0.286	0.1986
480 minute summer	S13	2.000	S12	1.4	0.330	0.096	0.1465

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Results for 100 year +30% CC 480 minute winter. 1920 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	S4	248	73.848	-0.422	11.0	1.6715	0.0000	OK
480 minute winter	S5	248	74.741	0.075	11.0	0.0851	0.0000	OK
480 minute winter	S6	248	74.946	0.072	9.1	0.0810	0.0000	OK
480 minute winter	S7	248	75.245	0.067	8.2	0.0758	0.0000	OK
480 minute winter	S8	248	75.854	0.042	7.3	0.0067	0.0000	OK
480 minute winter	S9	248	76.116	0.039	2.1	0.0061	0.0000	OK
480 minute winter	S10	240	76.390	0.034	2.1	0.0054	0.0000	OK
480 minute winter	S11	232	76.485	0.024	0.8	0.0038	0.0000	OK
480 minute winter	S12	248	76.343	0.048	4.3	0.0077	0.0000	OK
480 minute winter	S13	248	76.551	0.028	1.1	0.0044	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
480 minute winter	S4	Infiltration		11.0			
480 minute winter	S5	1.006	S4	11.0	0.952	0.241	0.5904
480 minute winter	S6	1.005	S5	9.1	0.810	0.215	0.3509
480 minute winter	S7	1.004	S6	8.2	0.790	0.194	0.4731
480 minute winter	S8	1.003	S7	7.3	0.985	0.077	0.1439
480 minute winter	S9	1.002	S8	2.1	0.592	0.142	0.0970
480 minute winter	S10	1.001	S9	2.1	0.643	0.112	0.0819
480 minute winter	S11	1.000	S10	0.8	0.345	0.055	0.0373
480 minute winter	S12	2.001	S8	4.3	0.884	0.220	0.1639
480 minute winter	S13	2.000	S12	1.1	0.312	0.076	0.1216

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Results for 100 year +30% CC 600 minute summer. 2040 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	S4	315	73.851	-0.419	12.1	1.8408	0.0000	OK
600 minute summer	S5	315	74.745	0.079	12.1	0.0895	0.0000	OK
600 minute summer	S6	315	74.949	0.075	10.0	0.0852	0.0000	OK
600 minute summer	S7	315	75.249	0.071	9.1	0.0802	0.0000	OK
600 minute summer	S8	315	75.856	0.044	8.1	0.0070	0.0000	OK
600 minute summer	S9	315	76.118	0.041	2.4	0.0066	0.0000	OK
600 minute summer	S10	315	76.392	0.036	2.4	0.0058	0.0000	OK
600 minute summer	S11	315	76.486	0.025	0.9	0.0040	0.0000	OK
600 minute summer	S12	315	76.346	0.051	4.7	0.0081	0.0000	OK
600 minute summer	S13	315	76.552	0.029	1.2	0.0046	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
600 minute summer	S4	Infiltration		12.1			
600 minute summer	S5	1.006	S4	12.1	0.978	0.265	0.6324
600 minute summer	S6	1.005	S5	10.0	0.830	0.236	0.3761
600 minute summer	S7	1.004	S6	9.1	0.815	0.215	0.5092
600 minute summer	S8	1.003	S7	8.1	1.012	0.085	0.1552
600 minute summer	S9	1.002	S8	2.4	0.614	0.163	0.1067
600 minute summer	S10	1.001	S9	2.4	0.668	0.128	0.0901
600 minute summer	S11	1.000	S10	0.9	0.347	0.062	0.0409
600 minute summer	S12	2.001	S8	4.7	0.906	0.240	0.1748
600 minute summer	S13	2.000	S12	1.2	0.320	0.083	0.1296

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Results for 100 year +30% CC 600 minute winter. 2040 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	S4	315	73.841	-0.429	9.1	1.3847	0.0000	OK
600 minute winter	S5	315	74.734	0.068	9.1	0.0771	0.0000	OK
600 minute winter	S6	315	74.939	0.065	7.5	0.0731	0.0000	OK
600 minute winter	S7	315	75.239	0.061	6.8	0.0688	0.0000	OK
600 minute winter	S8	315	75.851	0.039	6.1	0.0061	0.0000	OK
600 minute winter	S9	300	76.113	0.036	1.8	0.0057	0.0000	OK
600 minute winter	S10	300	76.387	0.031	1.8	0.0050	0.0000	OK
600 minute winter	S11	300	76.483	0.022	0.7	0.0036	0.0000	OK
600 minute winter	S12	315	76.338	0.043	3.5	0.0069	0.0000	OK
600 minute winter	S13	300	76.548	0.025	0.9	0.0040	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
600 minute winter	S4	Infiltration		9.1			
600 minute winter	S5	1.006	S4	9.1	0.904	0.199	0.5147
600 minute winter	S6	1.005	S5	7.5	0.768	0.177	0.3048
600 minute winter	S7	1.004	S6	6.8	0.754	0.161	0.4114
600 minute winter	S8	1.003	S7	6.1	0.940	0.064	0.1261
600 minute winter	S9	1.002	S8	1.8	0.566	0.122	0.0868
600 minute winter	S10	1.001	S9	1.8	0.615	0.096	0.0733
600 minute winter	S11	1.000	S10	0.7	0.328	0.048	0.0337
600 minute winter	S12	2.001	S8	3.5	0.835	0.179	0.1412
600 minute winter	S13	2.000	S12	0.9	0.300	0.062	0.1049

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Results for 100 year +30% CC 720 minute summer. 2160 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	S4	375	73.846	-0.424	10.6	1.6127	0.0000	OK
720 minute summer	S5	375	74.740	0.074	10.6	0.0835	0.0000	OK
720 minute summer	S6	375	74.944	0.070	8.8	0.0796	0.0000	OK
720 minute summer	S7	375	75.244	0.066	8.0	0.0749	0.0000	OK
720 minute summer	S8	375	75.854	0.042	7.1	0.0066	0.0000	OK
720 minute summer	S9	375	76.116	0.039	2.1	0.0061	0.0000	OK
720 minute summer	S10	375	76.390	0.034	2.1	0.0054	0.0000	OK
720 minute summer	S11	375	76.485	0.024	0.8	0.0038	0.0000	OK
720 minute summer	S12	375	76.342	0.047	4.1	0.0075	0.0000	OK
720 minute summer	S13	375	76.550	0.027	1.0	0.0042	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
720 minute summer	S4	Infiltration		10.6			
720 minute summer	S5	1.006	S4	10.6	0.942	0.232	0.5748
720 minute summer	S6	1.005	S5	8.8	0.804	0.208	0.3419
720 minute summer	S7	1.004	S6	8.0	0.787	0.189	0.4632
720 minute summer	S8	1.003	S7	7.1	0.975	0.075	0.1413
720 minute summer	S9	1.002	S8	2.1	0.592	0.142	0.0970
720 minute summer	S10	1.001	S9	2.1	0.643	0.112	0.0819
720 minute summer	S11	1.000	S10	0.8	0.338	0.055	0.0373
720 minute summer	S12	2.001	S8	4.1	0.873	0.210	0.1583
720 minute summer	S13	2.000	S12	1.0	0.298	0.069	0.1163

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Results for 100 year +30% CC 720 minute winter. 2160 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	S4	375	73.838	-0.432	8.1	1.2325	0.0000	OK
720 minute winter	S5	375	74.730	0.064	8.1	0.0726	0.0000	OK
720 minute winter	S6	375	74.935	0.061	6.7	0.0689	0.0000	OK
720 minute winter	S7	375	75.235	0.057	6.0	0.0645	0.0000	OK
720 minute winter	S8	375	75.848	0.036	5.4	0.0058	0.0000	OK
720 minute winter	S9	375	76.111	0.034	1.6	0.0053	0.0000	OK
720 minute winter	S10	375	76.386	0.030	1.6	0.0047	0.0000	OK
720 minute winter	S11	360	76.482	0.021	0.6	0.0033	0.0000	OK
720 minute winter	S12	375	76.336	0.041	3.1	0.0065	0.0000	OK
720 minute winter	S13	360	76.547	0.024	0.8	0.0038	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
720 minute winter	S4	Infiltration		8.1			
720 minute winter	S5	1.006	S4	8.1	0.875	0.177	0.4733
720 minute winter	S6	1.005	S5	6.7	0.746	0.158	0.2805
720 minute winter	S7	1.004	S6	6.0	0.725	0.142	0.3772
720 minute winter	S8	1.003	S7	5.4	0.910	0.057	0.1152
720 minute winter	S9	1.002	S8	1.6	0.548	0.108	0.0798
720 minute winter	S10	1.001	S9	1.6	0.594	0.085	0.0674
720 minute winter	S11	1.000	S10	0.6	0.317	0.041	0.0307
720 minute winter	S12	2.001	S8	3.1	0.807	0.159	0.1294
720 minute winter	S13	2.000	S12	0.8	0.291	0.055	0.0963

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Results for 100 year +30% CC 960 minute summer. 2400 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	S4	495	73.841	-0.429	8.9	1.3540	0.0000	OK
960 minute summer	S5	495	74.733	0.067	8.9	0.0762	0.0000	OK
960 minute summer	S6	495	74.938	0.064	7.4	0.0726	0.0000	OK
960 minute summer	S7	495	75.238	0.060	6.7	0.0683	0.0000	OK
960 minute summer	S8	495	75.850	0.038	6.0	0.0061	0.0000	OK
960 minute summer	S9	495	76.113	0.036	1.8	0.0057	0.0000	OK
960 minute summer	S10	495	76.387	0.031	1.8	0.0050	0.0000	OK
960 minute summer	S11	495	76.483	0.022	0.7	0.0036	0.0000	OK
960 minute summer	S12	495	76.338	0.043	3.4	0.0068	0.0000	OK
960 minute summer	S13	495	76.548	0.025	0.9	0.0040	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
960 minute summer	S4	Infiltration		8.9			
960 minute summer	S5	1.006	S4	8.9	0.898	0.195	0.5065
960 minute summer	S6	1.005	S5	7.4	0.768	0.175	0.3010
960 minute summer	S7	1.004	S6	6.7	0.750	0.158	0.4073
960 minute summer	S8	1.003	S7	6.0	0.935	0.063	0.1246
960 minute summer	S9	1.002	S8	1.8	0.566	0.122	0.0868
960 minute summer	S10	1.001	S9	1.8	0.615	0.096	0.0733
960 minute summer	S11	1.000	S10	0.7	0.328	0.048	0.0337
960 minute summer	S12	2.001	S8	3.4	0.829	0.174	0.1383
960 minute summer	S13	2.000	S12	0.9	0.300	0.062	0.1034

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Results for 100 year +30% CC 960 minute winter. 2400 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	S4	495	73.833	-0.437	6.5	0.9891	0.0000	OK
960 minute winter	S5	495	74.723	0.057	6.5	0.0648	0.0000	OK
960 minute winter	S6	495	74.929	0.055	5.4	0.0616	0.0000	OK
960 minute winter	S7	495	75.229	0.051	4.9	0.0582	0.0000	OK
960 minute winter	S8	495	75.845	0.033	4.4	0.0052	0.0000	OK
960 minute winter	S9	480	76.107	0.030	1.3	0.0048	0.0000	OK
960 minute winter	S10	480	76.383	0.027	1.3	0.0043	0.0000	OK
960 minute winter	S11	465	76.480	0.019	0.5	0.0030	0.0000	OK
960 minute winter	S12	495	76.332	0.037	2.5	0.0058	0.0000	OK
960 minute winter	S13	450	76.544	0.021	0.6	0.0033	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
960 minute winter	S4	Infiltration		6.5			
960 minute winter	S5	1.006	S4	6.5	0.821	0.142	0.4045
960 minute winter	S6	1.005	S5	5.4	0.704	0.128	0.2396
960 minute winter	S7	1.004	S6	4.9	0.689	0.116	0.3242
960 minute winter	S8	1.003	S7	4.4	0.857	0.046	0.0997
960 minute winter	S9	1.002	S8	1.3	0.516	0.088	0.0688
960 minute winter	S10	1.001	S9	1.3	0.559	0.069	0.0582
960 minute winter	S11	1.000	S10	0.5	0.305	0.034	0.0267
960 minute winter	S12	2.001	S8	2.5	0.760	0.128	0.1109
960 minute winter	S13	2.000	S12	0.6	0.266	0.041	0.0812

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Results for 100 year +30% CC 1440 minute summer. 2880 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	S4	750	73.832	-0.438	6.3	0.9587	0.0000	OK
1440 minute summer	S5	750	74.722	0.056	6.3	0.0638	0.0000	OK
1440 minute summer	S6	750	74.927	0.053	5.2	0.0604	0.0000	OK
1440 minute summer	S7	750	75.228	0.050	4.7	0.0570	0.0000	OK
1440 minute summer	S8	750	75.844	0.032	4.2	0.0051	0.0000	OK
1440 minute summer	S9	750	76.107	0.030	1.3	0.0048	0.0000	OK
1440 minute summer	S10	750	76.383	0.027	1.3	0.0043	0.0000	OK
1440 minute summer	S11	750	76.480	0.019	0.5	0.0030	0.0000	OK
1440 minute summer	S12	750	76.331	0.036	2.4	0.0057	0.0000	OK
1440 minute summer	S13	750	76.544	0.021	0.6	0.0033	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
1440 minute summer	S4	Infiltration		6.3			
1440 minute summer	S5	1.006	S4	6.3	0.814	0.138	0.3955
1440 minute summer	S6	1.005	S5	5.2	0.695	0.123	0.2337
1440 minute summer	S7	1.004	S6	4.7	0.680	0.111	0.3149
1440 minute summer	S8	1.003	S7	4.2	0.844	0.044	0.0966
1440 minute summer	S9	1.002	S8	1.3	0.516	0.088	0.0688
1440 minute summer	S10	1.001	S9	1.3	0.560	0.069	0.0582
1440 minute summer	S11	1.000	S10	0.5	0.296	0.034	0.0267
1440 minute summer	S12	2.001	S8	2.4	0.751	0.123	0.1077
1440 minute summer	S13	2.000	S12	0.6	0.261	0.041	0.0796

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Results for 100 year +30% CC 1440 minute winter. 2880 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	S4	750	73.827	-0.443	4.9	0.7456	0.0000	OK
1440 minute winter	S5	750	74.716	0.050	4.9	0.0562	0.0000	OK
1440 minute winter	S6	750	74.921	0.047	4.1	0.0536	0.0000	OK
1440 minute winter	S7	750	75.223	0.045	3.7	0.0505	0.0000	OK
1440 minute winter	S8	750	75.841	0.029	3.3	0.0046	0.0000	OK
1440 minute winter	S9	750	76.104	0.027	1.0	0.0042	0.0000	OK
1440 minute winter	S10	750	76.380	0.024	1.0	0.0037	0.0000	OK
1440 minute winter	S11	750	76.478	0.017	0.4	0.0027	0.0000	OK
1440 minute winter	S12	750	76.327	0.032	1.9	0.0051	0.0000	OK
1440 minute winter	S13	750	76.542	0.019	0.5	0.0030	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
1440 minute winter	S4	Infiltration		4.9			
1440 minute winter	S5	1.006	S4	4.9	0.758	0.107	0.3305
1440 minute winter	S6	1.005	S5	4.1	0.653	0.097	0.1960
1440 minute winter	S7	1.004	S6	3.7	0.636	0.087	0.2653
1440 minute winter	S8	1.003	S7	3.3	0.786	0.035	0.0815
1440 minute winter	S9	1.002	S8	1.0	0.478	0.068	0.0572
1440 minute winter	S10	1.001	S9	1.0	0.518	0.053	0.0483
1440 minute winter	S11	1.000	S10	0.4	0.281	0.028	0.0225
1440 minute winter	S12	2.001	S8	1.9	0.702	0.097	0.0912
1440 minute winter	S13	2.000	S12	0.5	0.253	0.034	0.0682

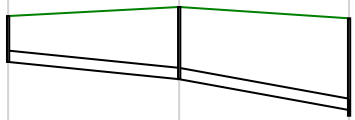
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Killingbeck Drive LS14 6FD

File: P4920 - Existing network 2026-09-29 existing brp
Network: Storm Network
Tony Cooper
07/10/2026

Node Name	S11	S10	S9	S8	S7	S6	S5	S4
A4 drawing Hor Scale 1500 Ver Scale 100 Datum (m) 70.000								
Link Name	1.000	1.001	1.002	1.003	1.004	1.005	1.006	
Section Type	150mm	150mm	150mm	225mm	225mm	225mm	225mm	
Slope (1:X)	149.1	89.5	143.8	30.2	149.9	150.1	129.0	
Cover Level (m)	77.100	77.100	77.100	77.100	76.560	76.259	76.512	76.310
Invert Level (m)	76.461 / 76.356	76.356 / 76.077	76.077 / 75.887	75.812 / 75.178	75.178 / 74.874	74.874 / 74.666	74.666 / 74.270	
Length (m)	15.652	24.980	27.320	19.158	45.581	31.219	51.095	

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Node Name		S13	S12	S8
A4 drawing Hor Scale 1500 Ver Scale 100 Datum (m) 71.000				
Link Name		2.000	2.001	
Section Type		150mm	150mm	
Slope (1:X)		148.8	82.6	
Cover Level (m)		77.130	77.250	77.100
Invert Level (m)		76.523	76.295 / 76.295	75.887
Length (m)		33.936	33.695	

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SITE:	Colliers Park, Wrexham	Job No:	3829
PAGE:	2	Date:	26/11/18
BY:	K.Blackwell	Checked:	I.R.

Post Development:

The post development site run-off coefficients are as follows :-

Greenfield - 0.35 = 35%
Roofs - 1.0 = 100%
Footpaths - 1.0 =100%
Housepaths - 1.0 = 100%
Roads - 1.0 = 100%

The proposal site areas measures as follows :

Roofed	895.588	1.00	895.588 m²
Gravel (Parking)	748.921	0.60	449.353 m²
Tarmac (Roads/Parking)	1,606.272	0.75	1,204.704 m²
Grassed	41,876.000	0.35	14,656.600 m²

Total Site Measures :	17,206.24 m²	or	1.721 Ha

Run-off

Using growth charts the actual predicted run-off can be calculated for both storm events Pre and Post development.

In accordance with PPS25 a climate change factor should be included :

$Q_{BAR\ (RURAL)}$ = 1.721 x 1.3 = 2.2373 (30% Climate change)

Pre Development

1 in 1 Year =	0.88x(0.108 x 1.715) =	0.163 L/S
1 in 100 Year =	2.18x(0.108 x 1.715) =	0.403 L/S

Post Development

1 in 1 Year =	0.88x(0.108 x 2.373) =	0.212 L/S
1 in 100 Year =	2.18x(0.108 x 2.373) =	0.526 L/S

The resulted increase in run-off will need to be mitigated.

Proposed areas considered in the design check taken from BRP Approved Drainage Strategy February 2018